

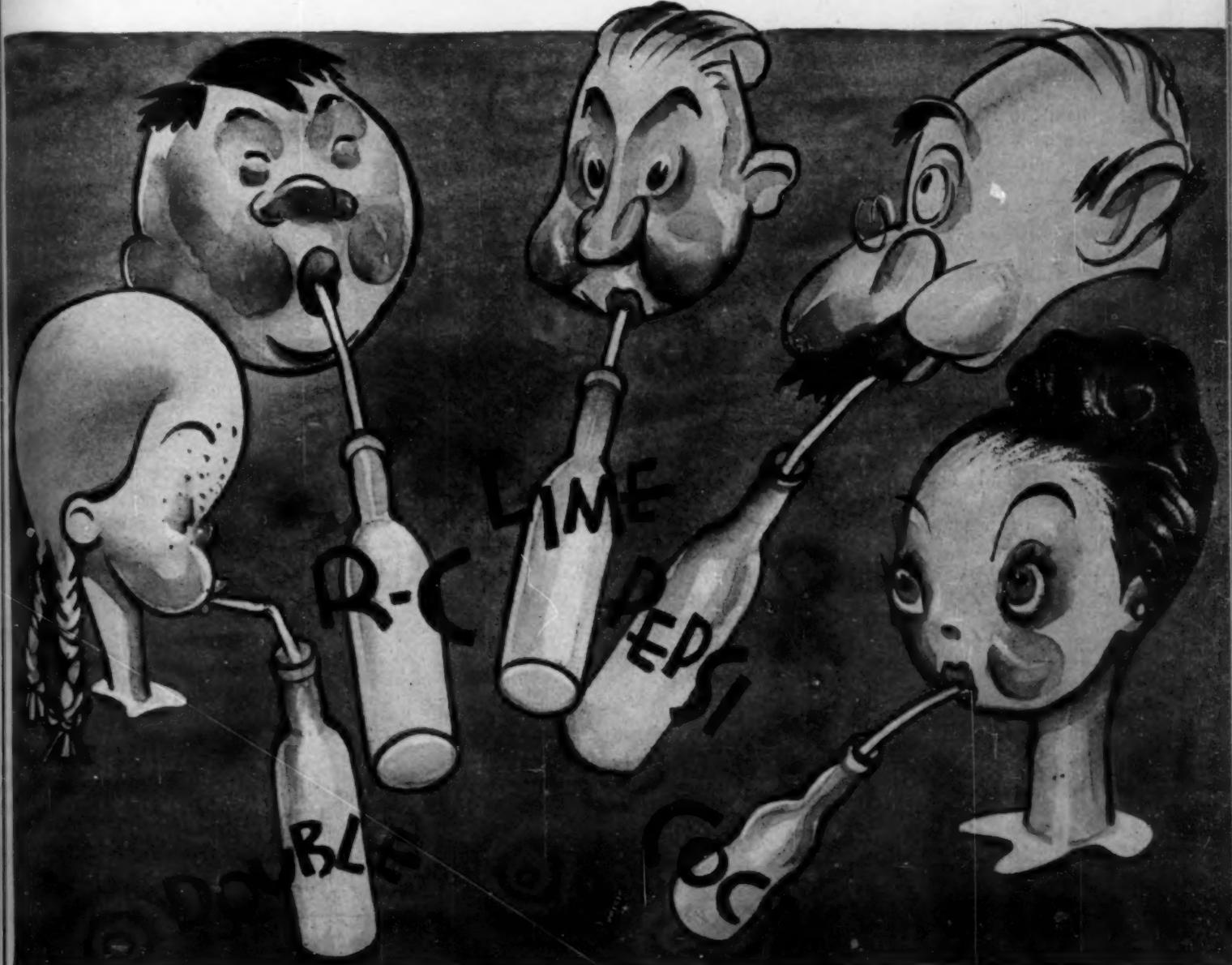
Consumer Reports

"FACTS YOU NEED
BEFORE YOU BUY

VOL. 9, NO. 8

Published Monthly by Consumers Union

AUGUST 19



ABC OF CARTELS
FOOD FOR ALL?
CARE OF LAWNS

COLA DRINKS
FLOURS FOR
HOME BAKING

TOILET TISSUE
ICE CREAM MIX
NEW DIRECTORS

CU's Case Against the Post Office

In 1941, the Postmaster General banned from the mails CU's Report on Contraceptive Materials. The basis for the ban was a 70-year-old law, originally intended as a barrier against the use of the mails for indecent and obscene material.

CU's Report was published in 1936 at the request of physicians and social workers. It was distributed to physicians, to birth control clinics and to CU members who had been advised by their physicians to use contraceptives.

The Post Office rejected a request by CU's attorneys for

removal of the ban, then the Board of Directors—with the backing of 96% of CU members—voted to appeal to the courts. Court costs have been met entirely from contributions of individuals, not from regular CU funds.

The question of whether or not the Postmaster can legally ban mailing of the Report was first argued in the U. S. District Court in Washington, D. C. last January. The Court dismissed the action brought by CU against the Postmaster General. This decision was followed by appeal to the U. S. Court of Appeals, as discussed below.

The case of Consumers Union against the Postmaster General now awaits the decision of the United States Court of Appeals for the District of Columbia. In the most recent attempt to lift the Post Office ban on the mailing of CU's "Report on Contraceptive Materials," Osmond K. Fraenkel, heading CU's attorneys, argued the case in Washington on May 30, in appeal from the decision of the United States District Court which had upheld the Post Office ban.

Members of the Appeals Court were Chief Judge Groner, Associate Judge Edgerton and District Court Judge Morris. Government lawyers had not yet filed a brief at the time of the hearing, but they argued two main points: (1) That the determination by the Postmaster General was one of fact and therefore should not be reviewed in the courts at all; (2) that the method of distribution adopted by CU wasn't sufficiently safeguarded to prevent the report from getting into improper hands, and that the statute under which it was banned had never been so broadly construed as to permit the distribution of a pamphlet of this kind to lay people.

In the brief filed with the Court of Appeals, CU's attorneys had

pointed out that "the First Amendment to the Constitution prohibits Congress from passing any law abridging freedom of speech or of the press"; that the CU report can in no way cause harm to the state, but rather will "enable the public to lead better and fuller lives," thereby bringing it within the constitutional protection; and that reasonable judicial interpretations of the statute under which the pamphlet was banned demand that mailing of information about contraceptives should be barred only if disseminated with an improper purpose.

The Court asked lawyers for the Government what they would say to the contention that the Constitution permits distribution of such a pamphlet. In line with their oral reply that the Constitution permits only qualified persons, such as doctors, to receive such information through the mails, the brief filed by Government attorneys after the hearing admits that "judicial interpretations of the statute . . . have excluded from its operation distribution to physicians and scientists . . ." of such information. But it adds that "even these interpretations cling to the limitation that indiscriminate distribution is condemned."

CU's attorney argued that distribu-

tion had not been indiscriminate and that the means taken to limit it were sufficient.

During the hearing Mr. Fraenkel distributed to members of the Court copies of the *Journal of the American Medical Association*, December, 1943; *Fortune*, Feb., 1938; and *Reader's Digest*, July, 1943. All of these magazines carried articles in important respects similar to CU's "Report on Contraceptive Materials," and all had been distributed through the mails without objection from the Postmaster General. Attorneys for the Government said that they had not seen these articles before; their brief stated that the Postmaster evidently had not seen them either, and that they had merely "escaped by good chance a fate which they deserved."

In a brief rebuttal argument, Mr. Fraenkel answered the Government's concern for the protection of the morals of the young. He pointed out that since CU's pamphlet makes clear that there is no completely effective contraceptive, it cannot be considered as an inducement to immorality.

The case may now develop in one of several ways: The Court of Appeals may grant CU a complete victory by a decision that the pamphlet

(cont'd on page 222)

CONSUMERS UNION is a non-profit organization chartered under the Membership Corporation Laws of New York State. Its purpose is to furnish unbiased, usable information to help families meet their buying problems, get their money's worth in their purchases, develop and maintain an understanding of the forces affecting their interests as consumers. Consumers Union has no connection with any com-

mercial interest and accepts no advertising; income is derived from the fees of members, each of whom has the right to vote for candidates to the Board of Directors. More than 70 educators, social workers and scientists sponsor Consumers Union and a national advisory committee of consumer leaders contributes to the formulation of policy (names of the members of the committee will be furnished on request).

- **CONSUMER REPORTS** each month gives comparative ratings of a variety of products based on tests and expert examinations, together with general buying guidance, information on medical and health questions, and news of happenings affecting the consumer's interests. The Reports is the manual of informed and efficient consumers the country over.

THE BUYING GUIDE (published as the December issue of the Reports) each year brings together information from all the preceding issues with new material and special buying advice. Pocket-size, 384 pages, with ratings of several thousand products, the Buying Guide is an invaluable shopping companion. Every member gets a copy of the Guide with his membership.

BREAD & BUTTER reports each week on new and predicted price and quality changes in consumer goods, interprets Washington legislation as it affects consumers, reports government regulations and actions on the consumer front, advises on food buying and preparation.

SUBSCRIPTION FEES are \$4 a year, which includes subscription to the Reports and Buying Guide and Bread & Butter; \$3.50 without Bread & Butter (for foreign and Canadian memberships add 50¢). Reduced subscription rates are available for groups of 10 or more

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Membership involves no obligation whatsoever on the part of the member beyond the payment of the subscription fee.

Planning For Peace

It is a sad fact that millions of people who hate war and all its misery and brutality, who yearn for the return of peace, nevertheless cannot look forward to the end of the war without dread. Some are small business men who never made enough money to live decently until war came. Some are workers in war jobs who for the first time have discovered that when you have enough to eat every day you feel better and the kids get better marks in school. Some are men and women in their forties and fifties who had already been put on the shelf as too old until war made them useful, productive citizens again. They want the war to end, yet they are sick with fear that peace is going to take away what war has given them.

But it is a happy fact that the defeat of the enemy needn't spell defeat for millions of our own people. We know beyond any possible question that we have, or can readily provide, plants, machines, materials and other resources to produce enough food and clothing, houses and automobiles, radios and refrigerators, movies and books, hospitals and playgrounds for everybody. And since we can produce enough of everything for everybody, there's no good reason—insofar as production is concerned—why anyone should lack the necessities and a fair share of the luxuries.

The problem is not one of production, but of purchasing power. And it is our opinion that that problem can be licked. We believe that there are enough sound, workable proposals around to insure jobs and a decent standard of living for every family. The trouble is that no one plan or proposal, or even the hit-or-miss use of many of them will do the job.

To count on any one weapon, such as foreign trade, large scale housing construction, public works, accumulated consumer demand for goods, or revision of the tax structure to win the peace makes as much sense as counting on battleships or bombers or artillery alone to win the war. With the problems of reconversion, the return of the members of the armed forces to civilian life, the salvaging of communities left stranded by closed war plants, the resettlement of millions of migrated workers, the coming of peace presents the American people with strategic problems perhaps as great as those of the war.

And just as a grand strategy is needed for the efficient prosecution of a war, we need a grand strategy for our postwar economic readjustment and development—a grand strategy which would utilize every economic weapon and all of the nation's manpower to provide the opportunity for decent living standards for all. This would, of course, require some kind of civilian general staff such as is contemplated in the Kilgore Bill. It would further require a high degree of planning (just as in war) and the surrender of many "states' rights" (just as in war).

Almost everyone, to be sure, wants postwar prosperity with full employment and high living standards. But too many still insist that "planning" will destroy our system of free enterprise. They refuse to recognize that the kind of postwar problems we face cannot be solved without planning; that planning will not destroy our economy, but preserve it.

Must millions of Americans dread the return of peace? Not if we have the courage and the understanding to tackle the problems of peace as boldly and decisively as we tackled the problems of war.

Consumer Reports

"FACTS YOU NEED
BEFORE YOU BUY"

"Because it was established for the very purpose of aiding families to buy wisely, to avoid waste and to maintain health and living standards, and because it is the largest technical organization providing such guidance, Consumers Union recognizes a special responsibility to the nation. In full awareness of that responsibility, we pledge ourselves to do everything in our power to help Americans as consumers make the greatest possible contribution to the national need."—FROM A RESOLUTION ADOPTED ON DECEMBER 10, 1941, BY THE DIRECTORS.

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REPORTS ON PRODUCTS

Ratings of products represent the best judgment of staff technicians or of consultants in universities, governmental and private laboratories. Samples for test are in practically all cases obtained on the open market by CU's shoppers. Ratings are based on laboratory tests, carefully controlled use tests, the opinion of qualified authorities, the experience of a large number of persons, or on a combination of these factors. Even with rigorous tests, interpretation of findings is a matter on which expert opinion often differs. It is Consumers Union's pledge that opinions entering into its evaluations shall be as free from bias as it is possible to make them.

Cola Drinks

Comparison of a dozen popular brands, with some notes on Coca Cola and Pepsi Cola, and the rivalry between them

Coca-Cola still maintains the dubious distinction of giving you the least for your money in cola drinks. But aside from that, it's no better and no worse than the dozen or so other widely distributed brands of cola beverages on the market, CU tests show. In fact, take off the label, and chances are you won't be able to recognize your favorite cola drink at all—except, perhaps, for a minor difference in sugar content. That being the case, it's entirely up to you whether or not you want "twice as much for a nickel" during "the pause that refreshes."

WAR OF THE COLAS

Unless you've managed to stay away from radio commercials and newspaper and magazine ads for the past few years, you'll probably recognize the two quotations above as the slogans for *Pepsi-Cola* and *Coca-Cola*, respectively. And you probably know, too, that these two leading producers of cola beverages have been something less than bosom friends. In fact, the legal staff of *Coca-Cola* appears to have spent a good deal of its time and energy in asserting that *Coca-Cola* was the cola drink; that *Pepsi-Cola* was an unwelcome and illegal intruder; that the word "cola" in any form belonged to *Coca-Cola*. The whole problem dragged from one court to another for many years, with *Coca-Cola* receiving little satisfaction, and its competitor growing by leaps and bounds. But in 1942, after a decision by the Judicial Committee of the Privy Council (the British Empire's equivalent to our Supreme Court) to the effect that the *Pepsi-Cola* trade mark did not infringe on *Coca-Cola's* in Canada, the companies

finally agreed to stop their squabbles. They disposed of all litigation between them with reluctant recognition on the part of *Coca-Cola* that *Pepsi-Cola* did, in fact, exist in its own right. Which was no more than the public had recognized long before.

COUP FOR PEPSI

Right about then, *Pepsi-Cola* was able to make a substantial, though temporary, gain over its rivals. Sugar rationing was pinching the soft drink industry, and it looked for a while as though wartime cuts in sugar supplies might be a serious problem to all of the cola companies. But in 1943, *Pepsi-Cola*, through its Mexican subsidiary, Mexican-American Flavors Co. wangled more sugar for itself than rationing allowed. This was done through the simple expedient of a contract between the Mexican-American Flavors Co. and Mexican sugar producers, which gave the company all the sugar supplies not locally needed, provided that this surplus be put into sugar syrups. At this time, OPA placed no limitations on the rationing allotment of sugar syrups, and a sizable share of the Mexican surplus found its way into *Pepsi-Cola* bottles.

As was to be expected, this scoop by *Pepsi-Cola* did not sit well with other soft drink manufacturers. And in March 1944 Walter S. Mack, Jr., president of *Pepsi-Cola*, announced the termination of the happy state of affairs, reporting that, "An order . . . by the U. S. government . . . makes it impossible to continue the operation of the Mexican-American Flavors Co. after May 1, 1944."

But *Pepsi-Cola* is still considerably better off than its chief rival. For

Pepsi was always a very sweet drink, even in the sweet-drink field. Back in 1940, when it was last tested by CU, the sugar content of *Pepsi-Cola* was 13.5%, as compared with *Coca-Cola's* 10%. Now, with *Pepsi-Cola* scaled down to a 10.7% sugar content, the sugar formerly used for a hundred bottles is stretched to make something over 126, each sweeter than pre-war *Coca-Cola*. Whereas *Coca-Cola*, unable to make such a drastic reduction in sugar content, now contains 9.3% sugar, and can make the 1940 ration for 100 bottles stretch to only 107. In view of the fact that sugar allotments are in terms of consumption at a base period, it's obvious that *Pepsi-Cola* wins this round, hands down.

"COKE" EXCLUSIVE

But, *Coca-Cola*, too, has had its inning. Perhaps you, like millions of other Americans, have adopted "coke" as part of your vocabulary. Perhaps, unwittingly, you've asked for a "coke" at your soda fountain, only to be told: "Sorry, we serve only *Pepsi-Cola*." Possibly you wondered why the fuss. You wanted a "coke," and you didn't care whether it was *Pepsi* or *Coca* or some other brand.

The clerk wasn't trying to be pedantic; what he told you is what he must say, according to decrees handed down by the Federal District Courts in Ohio, Pennsylvania, New York, Michigan, California and Washington. "Coke" and "Koke" applied to soft drinks are the exclusive property of *Coca-Cola*, they have ruled. To apply them to *Pepsi-Cola* or any



Coca-Cola is the only thing the clerk can legally give you when you ask for a "coke," the courts have ruled.

other soft drink is false and misleading. Which means that, insofar as it is possible to protect a word in common usage, *Coca-Cola* will retain the benefits it has built up through millions of dollars it spent on advertising to make "have a coke" a national slogan.

WHAT'S IN THEM

Though they differ somewhat in proportions of the ingredients used, the cola beverages on the market are basically much the same. The extract of the kola (or cola) nut, or an artificial flavoring simulating it, is used to give their distinctive flavor. To this is added the extract from coca leaves (the flavorful portion of cocaine-producing plants, from which the cocaine has been extracted), sugar, acid, artificial flavoring, caramel coloring and carbonated water.

The kola nut, used medicinally as a nerve and heart stimulant, contains two to three percent caffeine. But less than a half ounce of kola extract goes into a gallon of syrup, which is then diluted with about five times as much carbonated water to make the finished drink, so that the natural caffeine content is very low. Some manufacturers add caffeine, however, to give the drinks a more "stimulating" effect; but even so, the greatest amount of caffeine found in a six-ounce drink of any of the 12 brands in CU's tests was no more than a quarter of the amount of caffeine in a cup of coffee.

UNIFORMITY

The smaller cola manufacturers produce and bottle the finished product at one central factory. But for both *Coca-Cola* and *Pepsi-Cola*, the parent company produces only the base syrup, which is shipped along with the formula for dilution to bottling plants throughout the country, as well as to soda fountains. There are some 500 *Pepsi-Cola* bottlers in the U. S.; *Coca-Cola* has over 1000. Despite this, quality and composition of the finished product is kept quite uniform, CU tests indicate. Samples of *Coca-Cola* were purchased for test in New York, Philadelphia, Chicago, St. Louis, Birmingham, Atlanta, San Antonio, Denver and Los Angeles. Tests on three bottles from each city showed no significant difference in initial and retained carbonation, and sugar, acid and caffeine content. So, for practical purposes, it's safe to assume that a bottle of "coke" is the same the country over.

That *Pepsi-Cola*'s "twice as much



"The pause that refreshes," (left) vs. "Twice as much for a nickel," (right).

for a nickel" formula is aimed directly at *Coca-Cola* is seen clearly in a price survey of available brands. With the exception of *Coca-Cola*, definitely doing boom business at twice the price, and *Rob Roy*, with relatively insignificant distribution, all the single-service bottles found on the market contained 12 ounces. In most cities, they sold uniformly for 5¢ each, six for 25¢. In New York (and possibly in some other places) they were uniformly priced at 6¢.

Though single-service containers are the rule in the cola field, there are some brands put out in larger sizes, for home service. They're not all better buys, however, as the ratings which follow indicate.

CU TESTS

The following ratings were based on laboratory tests on three or more bottles of each brand. Original carbonation was checked, as well as retention of carbonation after the bottle had been allowed to stand at room temperature for 15 minutes and one hour. In single-service bottles, original carbonation is the important factor, since the drinks are generally consumed within a few minutes after the bottles are opened. All those tested were found good, except for *Wesco*, which rated only fair.

Acidity, another factor tested, was

found to vary little among the brands. There was some variation in sugar content, though not nearly so much as when cola drinks were tested in 1940. Then the sugar content varied from 10% to 13.5%; current tests showed a low of 8.6% for *Cleo Cola* and *American Home Cola*, and a high of 11% for *Co-op Cola*. Actually this means that though you may be able to detect a difference in sweetness if you sample two brands at the same time, you'll probably find them pretty much the same when you have an occasional glass. The sugar content of each brand is noted in the ratings. Each bottle was also checked for possible off-flavors; none was found in any of the brands tested.

In the ratings which follow, brands are listed in order of carbonation score: initial carbonation and carbonation retention. Unless otherwise noted, however, original carbonation was good. Figures in parentheses represent cost per six ounces.

BEST BUYS

Cleo Cola (Yosemite Beverage Co., San Francisco). 11¢ for 1 qt. (2.1¢). 8.6% sugar. Available nationally.

Sno-Cola (Table Products Co., Oakland, Calif.). 5¢ for 12 oz. (2.5¢); 7.5¢ for 1 qt. (1.4¢). Contained approximately 9.4% sugar. Available in Los Angeles, San Francisco and Seattle.

American Home Cola (National Tea Co., Chicago). 7¢ for 1 pt. 8 oz. (1.8¢). Contained approximately 8.6% sugar. Available in North Central States at National Tea Stores.

Canada Dry Spur (Bottled by M. H. Myers Beverages, NYC). 5¢ for 12 oz. (2.5¢). Contained approximately 9.9% sugar. Available nationally.

Pepsi-Cola (Pepsi-Cola Co., Long Island City, N.Y.). 5¢ for 12 oz. (2.5¢). Contained approximately 10.7% sugar. Available nationally.

ACCEPTABLE

(In decreasing order of carbonation)

Cleo Cola (see "Best Buys").

American Home Cola (see "Best Buys").

Sno-Cola (see "Best Buys").

Canada Dry Spur (see "Best Buys").

Pepsi Cola (see "Best Buys").

Rob Roy Cola (American Stores Co., Philadelphia). 7¢ for 12 oz. (3.5¢); 16¢ for 1 qt. (3¢). Contained approximately 8.9% sugar. Available nationally at American Stores.

Sparkoiler (R. H. Macy & Co., NYC). 11¢ for 1 pt. (4.1¢). Contained approximately 8.7% sugar. Available in NYC at Macy's Dep't Store.

Millbrook Club Kola (First National

Stores, Inc., Somerville, Mass.). 5¢ for 12 oz. (2½¢). Contained approximately 9.6% sugar. Available in New England and New York State at First National Stores.

Royal Crown Cola (Nehi Beverage Co., Louisville, Ky.). 5¢ for 12 oz. (2½¢). Contained approximately 9.6% sugar. Available nationally.

Co-op Kola (National Co-operatives Inc., Chicago). 5¢ for 12 oz. (2½¢). Con-

tained approximately 11% sugar. Available nationally at Co-op Stores.

Coca-Cola (Coca-Cola Co., Atlanta, Ga.). 5¢ for 6 oz. (5¢). Contained approximately 9.3% sugar. Available nationally.

Wescola (Kroger Grocery & Baking Co., Cincinnati). 7¢ for 1 pt., 8 oz. (1.8¢). Carbonation only fair. Contained approximately 10.7% sugar. Available at Kroger Stores.

cific, Waldorf and Red & White (the 1,000-sheet roll) showed a drop in strength of paper, and all but Red & White weighed less per ream than they did two years ago. Pacific, however, is still a "Best Buy."

Brands in the ratings below are listed in order of quality. Where only one price is given, it represents cost per 1,000 sheets. Otherwise, figures in parentheses represent cost per 1,000 sheets.

BEST BUYS

The following were judged to give the best values for the money in the order given:

Bon-ton (A. Weitzman's Sons Paper Products, Bronx, N. Y.) 7¢. 4½ x 4½. Available in NYC.

Statler (Statler Tissue Co., Somerville, Mass.). 7¢. Available nationally.

Pacific (A&P, NYC). 5¢ for 650 sheets (7.7¢). Available nationally at A&P Stores.

ACCEPTABLE

(In estimated order of quality)

Bon-ton (see "Best Buys").

Varick (Francis H. Leggett & Co., NYC). 10¢. 4½ x 4½. Available in Eastern States.

Gotham (Gotham Tissue Corp., Salem, N. Y.). 7¢ for 650 sheets (10.8¢). Available in Northeast.

Statler (see "Best Buys").

Banner (L. Bamberger & Co.). 10¢. Available in Newark, N. J. at Bamberger's Dep't Store.

Co-op Verisoft Red Label (Eastern Co-operative Wholesale, Bklyn, N. Y.). 8¢. Available nationally at Co-op Stores.

Dainty White (John Wanamaker). 15¢. Available in NYC at Wanamaker's Dept Store.

Pacific (see "Best Buys").

Blue Diamond. 9¢. 4½ x 4½. Gray, spotted, many holes. Purchased at F & W Grand 10¢ Store.

Carmen (Biltmore Paper Co., Bronx, N. Y.). 13¢ for 500 double sheets, 4½ x 4½ (26¢). Facial tissue type.

Planet (Biltmore Paper Co.) 10¢. 4½ x 4½.

Bamberger's Health Tissue (L. Bamberger & Co.). 15¢ for 500 double sheets (30¢). Available in Newark, N. J. at Bamberger's Dep't Store.

Lexington Dual Tissue (Bloomingdale Bros.) 15¢ for 500 double sheets (30¢). Available in NYC at Bloomingdale's Dep't Store.

Macy's Duo-Soft (R. H. Macy & Co.). 14¢ for 500 double sheets (28¢). Available in NYC at Macy's Dep't Store.

Sitroux (Sitroux Co., NYC). 10¢ for 500 double sheets, 4½ x 4½ (20¢). Facial tissue type. Available nationally.

Soft-Weave (Scott Paper Co., Chester, Pa.). 13¢ for 500 double sheets (26¢). Available nationally.

Toilet Tissues

There have been some changes as a result of war measures, but general quality is much the same, CU finds in testing 84 brands

Toilet tissue prices have been held down very well since CU last tested tissues in 1942, and quality has not been materially lowered.

There has, however, been a striking change in color. Of the 83 brands tested this year, very few were really white. Whether or not gray and yellow shades are a wartime necessity, manufacturers have doubtless reduced their expenses by turning out poorly bleached papers. In some cases, they have also reduced the size of the sheets. *Eagle* and *Voile* were found to be at least a quarter of an inch narrower than their labels claimed, and a number of other brands were skimped an eighth of an inch.

Testing for bursting strength, weight and absorbency, CU technicians did not give consideration in the ratings to such qualities as crêping, embossing and color, since these are matters of individual preference. Some brands showed specks, spots and holes. These defects have been noted in the ratings.

STRENGTH & ABSORBENCY

Proper balance between the two conflicting but equally essential qualities of absorbency and strength is difficult to achieve. As a rule, the greater the absorbency of a paper, the weaker it is, and vice versa. For this reason final ratings were based mainly on the balance of strength and absorbency.

Absorbency frequently changes as paper stands on the shelves—at home or in the store. According to the National Bureau of Standards, "aging" for one hour at 100° C. produces about the same change in absorptive ability as storage for six months under ordinary conditions. Ten ab-

sorbency tests were run on each roll of tissue as purchased, and ten after artificial "aging."

These tests were made with a micro-burette, a device which delivers a measured drop of water onto the paper. The device was constructed to National Bureau of Standards specifications. The number of seconds required for each sample to absorb 1/100 of a cubic centimeter of water provides a measure of the absorbency.

HARSHNESS

Six brands—*Ambassador*, *Big Value*, *Eagle*, *Hy-Tex*, *Richmond* and *The Economical Roll*—were rated down because they were judged to be excessively harsh. While none of the other brands was considered excessively harsh, there were considerable differences in the softness of the various brands. Such differences did not affect the order of ratings because degree of softness is pretty much a matter of personal preference. Some persons prefer the cleansing tissue type of paper; others prefer somewhat harsher sheets. When you are buying a brand you have not used before, get one roll first, to see whether you like it.

Of the 44 brands of tissue tested in 1942, 25 were found in the stores and retested for current ratings. Although little change in quality was noted, there were a few brands—*Planet*, *Macy's Herald Square*, *United Cross* and *Co-op Red Label*—which showed greater absorbency this year. Although in some cases absorbency had been increased at the expense of strength, overall quality was still higher than formerly.

On the other hand, four brands dropped in quality. *Scot Tissue*, *Pa-*

Aimcee (Associated Merchandising Corp.). 9¢. Available at AMC stores¹. **Macy's Herald Square, Peach** (R. H. Macy & Co.). 10¢. Many small holes. Available in NYC at Macy's Dep't Store.

Hudson's (J. L. Hudson Co.). 10¢. 4½ x 4½. Available in Detroit at Hudson's Dep't Store.

Six-Seventy (Abraham & Straus). 8¢. 4½ x 4½. Available in Bklyn, N. Y. at Abraham & Straus Dep't Store.

Co-op Facial Quality (Eastern Cooperative Wholesale). 9¢ for 500 double sheets, 4½ x 4½ (18¢). Available nationally at Co-op Stores.

Seda (Gotham Tissue Corp.). 8¢. Available in Northeast.

Red Cross (A.P.W. Paper Co., Albany, N. Y.). 8¢. 4½ x 4½. Available nationally.

Scot (Scott Paper Co.). 8.5¢. Available nationally.

Morgan's Tinted (Morgan Paper Co., Springfield, Mass.). 15¢. 4½ x 4½.

Voile (Phoenix Toilet & Paper Mfg. Co., Phoenix, N. Y.). 7¢ for 650 sheets, 4½ x 4½ (10.8¢). Available in Southern States; also in N. Y. and Nebraska.

Williams (R. C. Williams & Co., NYC). 15¢. 4½ x 4½. Available nationally.

United Cross (Whelan Drug Co., NYC). 5¢. 4½ x 4½. Available nationally at Whelan and United-Whelan Drug Stores.

1000 Certified Grade (Mohawk Tissue Products Co., Bklyn, N. Y.). 10¢. 4½ x 4½. Available nationally.

Red & White Super Soft (Red & White Corp., Chicago). 10¢. 4½ x 5. Embossed. This is not the same as the Red & White Super Soft below. Available nationally except in Southern States at Red & White Stores.

Red & White Super Soft (Red & White Corp.). 8¢ for 650 sheets, 4½ x 4½ (12.3¢). Not to be confused with Red & White Super Soft packaged in 1000 sheets and embossed (see above). Available nationally except in Southern States at Red & White Stores.

Toiltex (National Paper Products Co., Carthage, N. Y.). 10¢. 4½ x 4½. Available in N. Y. State and Eastern Seaboard States.

Arline Tinted (Stix, Baer & Fuller). 10¢. 4½ x 4½. Available in St. Louis at Stix, Baer & Fuller's Dep't Store.

Conway (Marshall Field & Co.). 7¢ for 2000 sheets, 4½ x 4½ (3.5¢). Yellow paper. Ends unwrapped and dirty. Many holes. Available in Chicago at Marshall Field's Dep't Store.

Daintee (Krasne Bros., NYC). 8¢. 4½ x 4½. Available in N. Y. State.

SVB Duplex (Scruggs, Vandervoort & Barney). 13.3¢ for 500 double sheets (26.6¢). Facial tissue type. Pink. Available in St. Louis at Scruggs, Vandervoort & Barney's Dep't Store.

Set-in-Tile. 10¢ for 1500 sheets (6.7¢). Yellow paper, ends not wrapped. Dirty. Purchased at Wanamaker's Dep't Store, NYC.

A.P.W. Flat Satin (A.P.W. Paper Co.). 30¢ for 1500 flat sheets (20¢). Yellow paper. Available nationally.

Filene's Dual Tissue (Wm. Filene's Sons Co.). 13¢ for 500 double sheets (26¢). Facial tissue type. Available in Boston at Filene's Dep't Store.

Hazel (National Tea Co., Chicago). 5¢ for 650 sheets, 4½ x 4½ (7.7¢). Available in Midwest at National Tea Stores.

Ambassador (Diamond Match Co., NYC). 5.5¢ for 650 sheets (8.5¢). Would be a "Best Buy," except for its harshness. Available nationally.

Supreme (Kress 5 & 10¢ Store). 11¢ for 1500 sheets, 4½ x 4½ (7.3¢). Available at Kress Stores.

Dawn (Independent Grocers' Alliance Co., Chicago). 6¢ for 650 sheets, 4½ x 4½ (9.2¢). Embossed. Available nationally at IGA Stores.

Hearns (Hearns Dep't Stores, Inc.) 10¢. 4½ x 4½. In colors. Available in NYC at Hearns's Dep't Store.

Barclay Petal Soft (Barclay Tissue Corp., NYC). 13¢ for 500 double sheets, 4½ x 4½ (26¢). Facial tissue type. Pink. Available on Eastern Seaboard from Maine to Washington, D.C. and in Penna.

Santis (Park Tissue Mills, Inc., NYC). 7¢. 4½ x 4½. Available nationally.

The Economical Roll (Mohawk Tissue Products Co.). 5¢ for 650 sheets, 4½ x 4½ (7¢). Harsh. Available nationally.

All-Purpose (Barclay Tissue Corp.). 10¢ for 500 double sheets, 4½ x 4½ (20¢). Facial tissue type. Peach.

Big Value (Stop & Shop Supermarkets, Boston). 6¢. Size not marked; measured size, 4½ x 4½. Harsh. Available in Mass. and Conn. at Ecco Stores and Stop & Shop Supermarkets.

San Fay (Automatic Paper Machinery Co., Hoboken, N. J.). 10¢ for 500 double sheets. Facial tissue type. Available nationally.

able in Eastern Seaboard States.

Blue & White (Red & White Corp.). 5¢ for 650 sheets, 4½ x 4½ (7.7¢). Available nationally except in Southern States at Red & White Stores.

Filene's (Wm. Filene's Sons Co.). 9¢. 4½ x 4½. Available in Boston at Filene's Dep't Store.

Softir (Allegheny Tissue Corp., Bklyn, N.Y.). 7¢. 4½ x 4½. Available nationally.

Viking (A. P. W. Paper Co., Inc.). 6¢ for 650 sheets (9.2¢). Available nationally.

Wards Standard Quality Cat. No.—4333 (Montgomery Ward). 4.6¢ for 650 sheets, 4½ x 4½ (7.1¢). Embossed. Available by mail order.

A.P.W. Jr. (A.P.W. Paper Co.). 20¢ for 2000 sheets (10¢). Available nationally.

Guest (Stevens & Thompson Paper Co., Greenwich, N.Y.). 5¢ for 650 sheets, 4½ x 4½ (7.7¢). Available East of the Mississippi River, north of Virginia.

Kroger's Fleece (Kroger Grocery & Baking Co., Cincinnati). 6¢ for 650 sheets, 4½ x 4½ (9.2¢). Available in Central and Southern States at Kroger Stores.

Protex Super Soft (Rushmore Paper Mills, Inc., NYC). 5¢ for 650 sheets (7.7¢). Embossed. Available nationally.

Endura (Bloomingdale Bros.). 10¢. 4½ x 4½. Available in NYC at Bloomingdale's Dep't Store.

Dimaco (Diamond Match Co.). 7¢. 4½ x 4½. Available nationally.

Rosewood (First National Stores, Somerville, Mass.). 7¢. Available in New England and N. Y. State at First National Stores.

Roxy (Tri-Boro Paper Co., Bronx, N.Y.). 6¢. 4½ x 4½.

Eagle. 7¢. 4½ x 4½. Harsh, gray, many holes. Purchased at H. L. Green 10¢ Store.

Hudson Ultra Soft (Hudson Pulp & Paper Corp., NYC). 7.5¢. 4½ x 4½. Available on the Eastern Seaboard from Maine to South Carolina.

Hy-Tex (Fort Howard Paper Co., Green-



At casual glance they look alike, but there are great differences in strength and absorbency of the different brands, laboratory tests show.

¹ For list of AMC Stores see page 10 of the 1944 Buying Guide.

Bay, Wisc.). 13¢. 4½ x 4½. Harsh.
Richmond (First National Stores). 4¢
for 650 sheets (6.1¢). Harsh. Available
in New England and N.Y. State at
First National Stores.
Veri-Soft (Mohawk Tissue Products
Co.). 10¢ for 1500 sheets, 4½ x 4½
(6.7¢). Available nationally.

NOT ACCEPTABLE

The following were considered "Not Acceptable" because of very poor bursting strength or absorbency, or both:

Approved Cat. No.—830 (Sears Roe-
buck). 8.1¢. Embossed.
American (American Stores Co.). 7¢.
Bedford (Jordan Marsh Co.). 10¢. 4½ x
4½.
Co-op Blue Label (Eastern Cooperative
Wholesale). 7¢. 4½ x 4½.
Dr. Warren. 7¢ for 650 sheets (10.8¢).
4½ x 4½.
Gilmore (Gilmore Paper Corp.). 9¢. 4½

x 4½.
Kwilt (National Paper Products Co.).
8¢ for 650 sheets, 4½ x 4½ (12.3¢).
May'd Best (May'd Best Products). 7¢.
4½ x 4½.
Park Lane (Park Tissue Mills). 7¢. 4½
x 4½.
Park Place (Park Tissue Mills). 5¢ for
650 sheets, 4½ x 4½ (7.7¢).
Pillow (Stevens & Thompson Paper
Co.). 10¢ for 650 sheets, 4½ x 4½
(15.4¢).
Soft Spun Wartime Package (Stevens
& Thompson Paper Co.). 9.5¢. 4½ x
4½.
United Whelan (Whelan Drug Co.). 7¢
for 650 sheets (10.8¢). 4½ x 4½.
Vanity Fair. 6¢ for 650 sheets, 4½ x 4½
(9.2¢).
Waldorf (Scott Paper Co.). 4¢ for 650
sheets (6.2¢).
White Rose (Benjamin Weil). 7¢ for
650 sheets, 4½ x 4½ (10.8¢).

CU shoppers found one brand each
of maple, maple-walnut and orange-
pineapple mixes. No comparative
tests were done on these, but tasters
considered the merits of each one
individually. *Junket* maple, *Jell-O*
orange-pineapple and *Jell-O* maple-
walnut all rated high in flavor. Con-
sistency was good in all except *Jell-O*
maple-walnut, which was quite icy.

All brands and flavors were judged
on the basis of both flavor and con-
sistency, and ratings within each
group are in order of preference. Ap-
proximate cost per pint, represented
by the figure in parentheses, was cal-
culated from the cost of the mix and
added ingredients based on the fol-
lowing prices: ½ pint light cream,
16¢; 1 quart milk, 15¢; a 13-ounce
can of evaporated milk, 10¢; 1 pound
of sugar, 7¢. Where chocolate flavor-
ing was added to the vanilla mix, cost
per pint is for the vanilla ice cream
base without added cocoa or choco-
late syrup.

CHOCOLATE

ACCEPTABLE

Frizz (Kraft Cheese Co., Chicago). 33¢
for 5 oz. powder (22¢). Required ad-
dition of water and chocolate flavor-
ing. Good flavor and consistency.
Available nationally.

Junket (Chr. Hansen's Lab., Inc., Lit-
tle Falls, N. Y.). 9¢ for 4 oz. powder
(27¢). Required addition of cream.
Good flavor and consistency. Available
nationally.

Londonderry (Londonderry, San Fran-
cisco). 15¢ for 3 drams powder (21¢).
Required addition of cream, sugar and
chocolate flavoring. Good flavor and
consistency. Available nationally.

Ann Page Sparkle (A&P, NYC). 5¢ for
4½ oz. powder (14¢). Required addi-
tion of cream and milk. Fair flavor
and consistency. Available nationally
at A&P Stores.

Vertrees' Frosty-Mix (Vertrees Mig.
Co., Louisville, Ky.). 10¢ for 4½ oz.
powder (21¢). Required addition of
cream and milk. Variable; one pack-
age had good flavor and consistency,
another had fair flavor and poor con-
sistency. Available in Ky., Tenn., Va.,
W. Va., Ohio and Ind.

NOT ACCEPTABLE

Kool-Aid Mix (Perkins Prod. Co., Chi-
cago). 5¢ for 1 oz. powder (7¢). Re-
quired addition of sugar, water and
evaporated milk. Fair flavor, poor con-
sistency.

Ten-B-Low (Ten-B-Low Co., Colum-
bus). 29¢ for 10 oz. liquid (15¢). Re-
quired addition of water and choco-
late flavoring. Fair flavor, poor con-
sistency.

Jell-O Freezing Mix (General Foods

More Ice Cream Mixes

Chocolate, strawberry, maple, maple-walnut, orange-pineapple.
They're easy to make at home, and many of them are good,
CU's panel of taste testers determined after tasting 15 kinds

The best way to make chocolate ice cream in your automatic refrigerator is to use a good vanilla mix and add your own flavoring. Tasters participating in CU's tests of flavored mixes think the same is true of strawberry. But again, as in last month's tests of vanilla mixes, home-frozen ice cream, whatever its flavor, rated lower than the commercial product.

CHOCOLATE

Of eight chocolate ice creams judged for flavor and consistency in duplicate and triplicate taste tests, three were prepared from vanilla mixes by the addition of cocoa or chocolate syrup, according to directions on the packages. Two of these—*Frizz* and *Londonderry*—were good in both respects, rating higher as chocolates than they had as vanillas. *Frizz*, whose flavor was only "Fair" as plain vanilla, headed the list as chocolate ice cream. *Ten-B-Low* was more consistent, remaining in the "Poor" category where vanilla taste tests had placed it.

Of five brands packed with chocolate flavoring as an ingredient, only one—*Junket*—was considered "Good." Two types of *Junket*—one made with soya and one without—were rated about the same, and both

were a close second to *Frizz*. Many tasters objected to the other chocolate mixes because the cocoa used as flavoring did not blend well, and left a floury taste in the mouth.

Vanilla mixes, chocolate flavoring added, were compared with chocolate mixes, and both were tested against commercially-made ice cream. Even the best of the mixes—*Frizz* made with chocolate syrup—did not rate as high as store ice cream.

STRAWBERRY

Duplicate taste tests of four brands of strawberry mixes indicated that all of them might be improved by the addition of fresh strawberries, and that a good vanilla mix with crushed strawberries added would probably produce even better results. For, despite the presence of a very small amount of fruit in one—*Jell-O*—it was only fair in the opinion of the tasters. The others contained true or artificial flavoring and artificial coloring. *Junket*—with and without soya—used natural flavoring and rated much higher than any of the others.

So obvious was the inferiority of these mixes that none was compared with commercial strawberry ice cream, except in the memories of the tasters.

Corp., NYC). 11¢ for 5½ oz. liquid (14¢). Required addition of evaporated milk. Poor flavor and consistency.

STRAWBERRY

ACCEPTABLE

Junket (Chr. Hansen's Lab.). 9¢ for 4 oz. powder (27¢). Required addition of cream. Good flavor and consistency. Available nationally.

Vertrees' Frosty-Mix (Vertrees Mfg. Co.). 10¢ for 4½ oz. powder (21¢). Required addition of milk and cream. Fair flavor and consistency. Available in Ky., Tenn., Va., W. Va., Ohio and Ind.

Jell-O Freezing Mix (General Foods Corp.). 12¢ for 5¼ oz. liquid (14¢). Required addition of evaporated milk. Fair flavor, poor consistency. Available nationally.

NOT ACCEPTABLE

Kool-Aid Mix (Perkins Prod. Corp.). 5¢ for 1 oz. powder (7¢). Required addition of sugar, water and evaporated milk. Poor flavor and consistency.

ASSORTED FLAVORS

ACCEPTABLE

Junket Maple Flavor (Chr. Hansen's Lab.). 9¢ for 4 oz. powder (27¢). Required addition of cream. Good flavor and consistency. Available nationally.

Jell-O Orange Pineapple (General Foods Corp.). 11¢ for 5½ oz. liquid (14¢). Contained crushed orange and pineapple. Required addition of evaporated milk. Good flavor and consistency. Available nationally.

Jell-O Maple Walnut (General Foods Corp.). 12¢ for 5¼ oz. liquid (14¢). Contained crushed walnuts. Required addition of evaporated milk. Good flavor, but icy. Available nationally.



FLOURS

Most of the all-purpose kind are enriched with vitamins and minerals, for better nutrition, and there are many other nutritious kinds including soy, whole wheat, rye, gluten

Education has done little to change the eating habits of Americans so far as the preference for white bread is concerned. But, failing to bring the American Mohammed to the mountain of good nutrition, as embodied in whole grain bread, the government is doing what it can to bring the mountain—in the form of white bread enriched with some of the vitamins and minerals removed from whole wheat in the milling process—to the reluctant Mohammed. And, though addition of certain vitamins and minerals to white flour is not mandatory, as it is with commercially-baked white bread, all except three of the 26 brands of white flour tested by CU were enriched. This is in contrast to 1942 test samples, in which only 14 of the 24 brands tested were enriched.

The trend toward higher food-value baked goods is also reflected in the growing popularity of whole-grain and partially refined flours, and of the highly nutritious soy bean. Competing with enriched flour this year are several whole wheat, rye and soya flours (CU shoppers found 18 in all) which were not so readily available two years ago. But the much-refined cake flours, keeping their emphasis on texture, have been affected scarcely at all by the new emphasis on vitamins. Only one of the 21 brands tested—Sperry's Cake & Pastry Flour—was enriched.

ABC OF ENRICHMENT

Normally, bread and cereal products supply Americans with about one-third of their total food calories; today the scarcity of meat causes an even greater reliance on the protein, mineral and vitamin content of bread. The important place of bread in the national diet, coupled with the fact that for many years the sale of whole wheat bread in this country has represented only two or three percent of total sales, led nutritionists to view with alarm the continued "improvements" in the milling of white flour. For millers' efforts to develop a fine, white flour resulted in almost com-

plete elimination of the vitamin and mineral-bearing germ and bran (the outer coating of the grain) from modern, roller-processed white flour.

Since restoration or addition of some of the lost nutrients to white bread and flour seemed quicker and easier than changing national taste, the enrichment program was begun. Legislation has been enacted which makes it mandatory for bakers to increase the nutritive content of white bread, and since October 1, 1943, when amended flour-enrichment standards became effective, the Food & Drug Administration has required the addition of definite amounts of thiamine (vitamin B₁) niacin, riboflavin and iron to all white flours which are labeled "enriched." The amounts added coincide, roughly, with the amounts of these substances removed during the refining process. It must be noted, however, that enrichment does not mean restoration of all the elements removed from the flour during milling. As the program stands, the ingredients required for enrichment represent a nice balance between good nutrition and the cost and availability of the enriching substances. Certain important factors of the B vitamin complex, for example, are omitted because of their cost, so that even enriched white bread does not come up to the nutrition standards of whole-grain bread.

The addition of vitamin D and calcium to enriched flours is optional, except in the case of self-rising flour. Here the addition of calcium is mandatory if the product is enriched, since the addition of calcium salts to the phosphated flour used does not present the technical baking difficulties often encountered when calcium salts are added to unphosphated flours.

The method commonly used for vitamin enrichment is addition of pure vitamin compounds or concentrates to the refined whole flour. In this way, the baking characteristics of the flour are unaltered.

A second way to achieve the same

vitamin concentration is through modification of the milling process to produce a "long-extraction" flour, containing a higher percentage of the wheat kernel than ordinary white flour. In this way only riboflavin and iron need be added to reach the required enrichment levels. Bread enriched in this way is between white and whole wheat bread in color and appearance, and has been less well received than ordinary enriched white bread for this reason.

In protein content and resulting strength of dough, all-purpose flour falls between old-fashioned bread flour and cake flour. In general, the higher the protein content, the stronger the dough. Thus cake flour, a low-protein, highly refined and bleached product, milled from soft winter wheat, is perfect for fine-textured cakes, cookies and pastries, but inadequate in dough-strength for bread or yeast-risen cakes. The very soft cake flours (see comments in ratings) are particularly suitable for cakes which require little strength (sponge and angel cakes) and, as they are also quite short, where little or no shortening is required. Developed to serve as the one flour for all home baking most of the all-purpose flours tested lived up to their name, though some were of such high protein content and produced such a strong dough that they are recommended for bread only (see comments in ratings). Of course, if you use the enriched, higher-protein, all-purpose flour rather than cake flour whenever possible, you'll be giving your family more nourishing cakes and pies at lower cost (cake flour averages about two cents a pound higher than all-purpose).

Laboratory tests performed on 26 all-purpose white flours and 21 cake flours determined moisture, ash and protein content. Ratings were based also on results of actual baking tests in which dough quality, color and loaf-volume (rising quality) were given greatest consideration in the case of all-purpose flours; and dough quality, rise, texture, grain and flavor in the case of cake flours. Only enriched all-purpose flours were considered "Best Buys."

WHOLE WHEAT, SOYA & RYE

Nutrition experts agree that whole wheat bread is more desirable, nutritionally, than white, whether it is enriched or not. They recommend the new "peeled" wheat, in which the epidermis of the grain has been re-

moved before milling, for those who do not easily digest the coarse, branny covering of the wheat kernel. Of the 10 whole wheat flours tested, some are called graham and some whole wheat. According to the Food & Drug Administration's definitions, these terms are synonymous and refer to flour made from the entire wheat kernel which contains in their natural proportion, all the constituents of the cleaned grain. In the trade, however, this class of flour is graded according to type, "graham" containing coarser particles of bran than the fine-bran type usually called "whole wheat."

In the tests, size and amount of bran particles were determined by sifting the flours through three mesh sizes.

The government is boosting soya flour as the war's most dramatic food development. The very high content of good quality protein in the soy bean (up to 40% in contrast to a maximum of 15% in whole wheat), the high percentage of easily digested fat, and the high vitamin and mineral content make soy products almost perfect as meat substitutes.

Since soya flour contains no starch it cannot be used alone for baking, but mixed with wheat flour (10% to 15% soya is recommended for bread, 25% to 30% for cakes) it makes excellent bread, muffins, cookies, cakes and pie crusts. Examples of both full-fat and defatted soya flour appear in the ratings. Full-fat flour contains all the fat of the bean; the defatted type is refined by the removal of some of the fat in the interest of palatability. Although refined soya flour is the less nutritious, it generally makes bread of a more pleasing color and flavor,

without the bitterness often present in full-fat soya bread. A full-fat loaf is likely to be heavy, compact and rather soggy because the oil in the flour retards rise and speeds fermentation. Of the brands tested, however, the one with the highest rating—*Mellow Soy Flour*—was a full-fat product.

Because of the high percentage of fat in all soya flours, only 10% to 15% shortening is recommended for any soya flour bread, and in making bread from full-fat flour, only about 5% to 10% shortening should be added. The full-fat type is best for cakes which require more shortening, but even here less should be added than wheat flour recipes call for.

Soya flour should be kept in a cool place away from sunlight, for the oil in the flour is subject to oxidation and consequent rancidity. However, pressure curing of the beans to retard rancidity has recently improved the keeping qualities of soya flour and made possible a wider use of the full-fat flour which formerly rancidified quickly.

Soya flours were tested for moisture, fat and protein content, and examined for color. Bread baked with 10% soya and 90% patent (milled, white, wheat flour) was rated on the basis of volume rise, texture and general appearance of the loaf, color of crumb and flavor. The color of soya flour bread ranges from sallow brown to pale yellow.

Two rye flours were tested. Both were medium grade. Higher grades, having a lower ash and protein content, are called patent, light and cream. The trade rates pumpernickel below medium grade because it is a heavier flour. In the test bakings, one part of rye mixed with two parts of



The flours above represent some of the many varieties now available for use in home baking. For ratings of these and other brands see the following pages.

wheat flour produced a loaf of the light-rye or Vienna style. The better quality flour gave a loaf of lighter and finer texture.

A comparison of this year's purchases with those made two years ago reveals an average price rise of 20% for all-purpose flours; cake flour prices have gone up 6%. Ceiling prices which became effective in October, 1942 are in general higher than present selling prices.

Among brands tested in 1942 and retested this year, very little change in quality was found, except that one all-purpose flour not enriched before (*Finast*) is now meeting enrichment specifications. *Finast* has risen in quality from "Good" to "Excellent," and in price a little over $\frac{1}{2}$ ¢ a pound. It is still well below the average price of 6.2¢ per pound. *Bohacks*, on the other hand, went up in price from 4¢ to 8¢ and down in quality from "Good" to "Fair." It has not joined the enriched category.

Of the four cake flours which have actually gone *down* in price, only *Ecco*, dropping from 9.1¢ to 6.9¢ a pound, has fallen below the average price of 8.1¢. But *Red & White* made a marked gain in quality. In 1942 it was "Not Acceptable"; it is now rated "Excellent" and has dropped in price from 9.5¢ to 9.1¢ a pound.

The ratings which follow are in order of increasing cost per pound within each group. The figures in parentheses represent cost per pound.

ALL-PURPOSE WHITE FLOURS

BEST BUYS

Finast Fancy (First National Stores, Inc., Somerville, Mass.). 24¢ for 5 lb. (4.8¢). Excellent quality. Bleached, enriched. Very good, spongy dough; suitable for bread. Available in New England and New York State at First National Stores.

Ecco (Stop & Shop Supermarkets, Boston, Mass.). 24¢ for 5 lb. (4.8¢). Excellent quality. Bleached, enriched. Very good, strong dough; suitable for bread. Available in Mass. and Conn. at Economy Grocery Stores and Stop & Shop Supermarkets.

Kitchen Craft (Famous Flours, Inc., Omaha, Nebr.). 25¢ for 5 lb. (5¢). 12¢ for 2 lb. (6¢). Excellent quality. Bleached, enriched. Very good, strong, spongy dough. Available at Safeway Stores in N. Y.; N. J.; Washington, D. C.; Richmond, Va. and throughout Western States.

Harvest Day Phosphated (Kroger Gro-

cery & Baking Co., Louisville, Ky.). 30¢ for 6 lb. (5¢). Excellent quality. Bleached, enriched. Very good, spongy dough. Available in Central and Southern States at Kroger Stores.

Harvest Day Self-Rising (Kroger Grocery & Baking Co., Cincinnati). 30¢ for 6 lb. (5¢). Excellent quality. Bleached, enriched; calcium phosphate, soda and salt added. Very good, spongy dough. Available in Central and Southern States at Kroger Stores.

ACCEPTABLE

EXCELLENT

Countryside Bread Flour (Economy Grocery Stores, Boston). 23¢ for 5 lb. (4.6¢). Bleached; not enriched. Very good, strong, spongy dough. Available in Mass. and Conn. at Stop & Shop Supermarkets and Economy Grocery Stores.

Finast Fancy (see "Best Buys").

Ecco (see "Best Buys").

Kitchen Craft (see "Best Buys").

Harvest Day Phosphated (see "Best Buys").
Harvest Day Self-Rising (see "Best Buys").

Omar Wonder Flour (Omar, Inc., Omaha, Nebr.). 27¢ for 5 lb. (5.4¢). Bleached, enriched. Very good, strong, spongy dough.

IGA—Family Flour (Independent Grocers' Alliance, Chicago). 27¢ for 5 lb. (5.4¢). Bleached, enriched. Very good, spongy dough. Available nationally at IGA Stores.

Gooch's Best (Gooch Milling & Elevator Co., Lincoln, Nebr.). 28¢ for 5 lb. (5.6¢). Bleached, enriched. Very good, spongy dough.

Victor Family (Crete Mills, Crete, Nebr.). 29¢ for 5 lb. (5.8¢). Bleached, enriched. Excellent, spongy dough. Available in Northern States between the Rocky Mountains and the Mississippi River.

Red & White Family Patent (Red & White Corp., Chicago). 31¢ for 5 lb. (6.2¢). Bleached, enriched. Good, very strong dough. Best for bread. Available nationally except in Southern States at Red & White Stores.

Occident (Russell-Miller Milling Co., Minneapolis). 32¢ for 5 lb. (6.4¢). Bleached, enriched. Very good, strong dough. Best for bread. Available in the Midwest, New England and States of N. Y., W. Va. and Penna.

Co-op—Bread Flour (National Co-operatives, Inc., Chicago). 32¢ for 5 lb. (6.4¢). Unbleached, enriched. Good, very strong dough; suitable for bread. Available nationally at Co-op Stores.

Pillsbury's Best (Pillsbury Flour Mills Co., Minneapolis). 14¢ for 2 lb. (7¢). Bleached, enriched. Excellent, strong dough; suitable for bread. Available nationally.

Gold Medal (General Mills, Inc., Minneapolis). 14¢ for 2 lb. (7¢). Bleached,

enriched. Very good, spongy dough. Available nationally.

Co-op Family Flour (National Co-operatives, Inc.). 15¢ for 2 lb. (7.5¢). Unbleached, enriched. Excellent, spongy dough. Available nationally at Co-op Stores.

Aunt Jemima Family Flour (Quaker Oats Co., Chicago). 35¢ for 3½ lb. (10¢). Unbleached, enriched. Excellent, spongy dough. Available nationally.

GOOD

Sunnyfield Family Flour (A&P, NYC). 10¢ for 2 lb. (5¢). Bleached, enriched. Good, strong dough. Available nationally at A&P Stores.

Blue Jewel (Jewel Tea Co., Barrington, Ill.). 26¢ for 5 lb. (5.2¢). Bleached, enriched. Good, spongy dough. Available nationally at Jewel Tea Co. Stores.

Gold Seal (American Stores Co., Philadelphia). 27¢ for 5 lb. (5.4¢). Bleached, enriched. Very good, strong dough. Available nationally at American Stores.

Heckers' (Standard Milling Co., Chicago). 14¢ for 2 lb. (7¢). Unbleached, enriched. Good, spongy dough; suitable for bread. Available in N. Y. and N. J.

Fisher's Blend (Fisher Flouring Mills Co., Seattle). 15¢ for 2 lb. (7.5¢). Bleached, enriched. Very good, spongy dough. Good as all-purpose; only fair for bread. Available in Western States.

Globe Al (Globe Mills, Los Angeles). 15¢ for 2 lb. (7.5¢). Bleached, enriched. Very good, spongy dough. Available on Pacific Coast.

Sperry Drifted Snow (Sperry Flour Co., San Francisco). 15¢ for 2 lb. (7.5¢). Bleached, enriched. Very good, strong, spongy dough. Available on Pacific Coast.

FAIR

Hazel Brand (National Tea Co., Chicago). 10¢ for 2 lb. (5¢). Bleached, not enriched. Good, strong dough, but an inferior grade flour with high ash content. Available in Midwest at National Tea Stores.

Bohack's Fancy Family Flour (H. C. Bohack Co., Brooklyn, N. Y.). 10¢ for 1½ lb. (8¢). Not enriched. Fair, strong, dough. Fair for bread. Available in Brooklyn and Long Island at Bohack Stores.

CAKE FLOURS

BEST BUYS

Island Manor (H. C. Bohack Co.). 19¢ for 2½ lb. (6.9¢). Excellent quality. Bleached. Good dough, firm, plastic and flaky. Available in Brooklyn and Long Island at Bohack Stores.

Sunnyfield (A&P). 20¢ for 2½ lb. (7.3¢). Excellent quality. Bleached. Excellent dough, very short and flaky. Available nationally at A&P Stores.

White Spray (First National Stores,

Inc.). 20¢ for 2½ lb. (7.3¢). Excellent quality. Bleached and matured. Very good dough, short, plastic and flaky. Available in New England and N. Y. State at First National Stores.

Hazel Brand (National Tea Co.). 20¢ for 2½ lb. (7.3¢). Excellent quality. Bleached. Very good dough, short, plastic and flaky. Available in Midwest at National Tea Stores.

ACCEPTABLE

EXCELLENT

Island Manor (see "Best Buys").

Sunnyfield (see "Best Buys").

White Spray (see "Best Buys").

Hazel Brand (see "Best Buys").

Victor (Crete Mills). 21¢ for 2½ lb. (7.6¢). Bleached. Very soft flour. Very good dough, short, plastic and flaky. Available in Northern States between the Rocky Mountains and the Mississippi River.

Kroger's Country Club Quality (Kroger Grocery & Baking Co., Cincinnati). 22¢ for 2½ lb. (8¢). Bleached and matured; very soft flour. Excellent dough, soft, plastic and flaky. Available in Central and Southern States at Kroger Stores.

Gold Seal (American Stores Co., Philadelphia). 22¢ for 2½ lb. (8¢). Bleached. A very soft flour. Excellent, very short, flaky dough. Available nationally at American Stores.

Fisher's Fine-Spun (Fisher Flouring Mills). 17¢ for 2 lb. (8.5¢). Bleached. Very soft flour. Very good dough, firm, plastic and flaky. Available on the West Coast and in Idaho, Nevada, Arizona, Montana and New Mexico.

Softasilk (General Mills). 25¢ for 2½ lb. (9.1¢). Bleached. High in protein (see text). Good dough, stiff, plastic and flaky. Available nationally.

Sno Sheen (Pillsbury Flour Mills). 25¢ for 2½ lb. (9.1¢). Bleached. Very soft flour. Excellent dough, short and flaky. Available nationally.

Swans Down (Igleheart Bros., Inc., Evansville, Ind.). 25¢ for 2½ lb. (9.1¢). Bleached. Very good dough, soft and plastic. Available nationally.

Red & White (Red & White Corp.). 25¢ for 2½ lb. (9.1¢). Bleached. Very good dough, stiff, plastic and flaky. Available nationally, except in Southern States, at Red & White Stores.

Freshbake (Grand Union Co., NYC). 25¢ for 2½ lb. (9.1¢). Bleached and matured. Very soft flour. Excellent dough, plastic and very flaky. Available in N. Y., N. J., Penna., Mass., Vt. and Conn. at Grand Union Stores.

Co-op (National Cooperatives, Inc.). 20¢ for 2 lb. (10¢). Bleached. Very good dough, short, plastic and flaky. Available nationally at Co-op Stores.

Globe Al Special (Globe Mills). 26¢ for 2½ lb. (11.6¢). Bleached. Very soft flour. Very good dough, firm, plastic and flaky. Available on Pacific Coast.

Presto Self-Rising (Best Foods, Inc., NYC). 15¢ for 1½ lb. (12¢). Bleached.

Very good dough, plastic and very flaky. Available nationally.

GOOD

Old Homestead Fancy Pastry (First National Stores). 25¢ for 5 lb. (5¢). Bleached. High protein (see text). Good dough, firm, plastic and strong. Available in New England and N. Y. State at First National Stores.

Sperry Cake & Pastry (Sperry Flour Co.). 27¢ for 5 lb. (5.4¢). Bleached and enriched. Very good dough, firm, plastic and flaky. Available on Pacific Coast.

Ecco (Economy Grocery Stores). 19¢ for 2½ lb. (6.9¢). Bleached. High protein (see text). Good dough, firm, plastic and strong. Available in Mass. and Conn. at Stop & Shop Supermarkets and Economy Grocery Stores.

Co-op (Consumer's Cooperative Association, North Kansas City, Mo.). 24¢ for 2½ lb. (8.7¢). Bleached and matured. Good dough, short, plastic and flaky. Available in Midwest at Co-op Stores.

FAIR

Countryside Pastry (Economy Grocery Stores). 23¢ for 5 lb. (4.6¢). Bleached. High protein (see text). Fair dough, stiff, plastic and strong. Available in Massachusetts and Central Connecticut at Stop & Shop Supermarkets and Economy Grocery Stores.

WHOLE WHEAT FLOURS

BEST BUYS

Gooch's Best (Gooch Milling & Elevator Co.). 23¢ for 5 lb. (4.6¢). Excellent quality wheat graham flour. Made from hard wheat; therefore suitable for bread only. Required somewhat more yeast and longer fermentation time than average.

Co-op (National Co-operatives, Inc.). 33¢ for 5 lb. (6.6¢). Excellent quality, unbleached. True graham — whole wheat of coarse bran type (see text). Very good flavor. Available nationally at Co-op stores.

ACCEPTABLE

EXCELLENT

Gooch's Best (see "Best Buys").

Co-op (see "Best Buys").

Fisher's Graham Flour (Fisher Flouring Mills Co.). 19¢ for 2 lb. (9.5¢). True graham with excess of bran over flour. Best for bread, but soft enough to be used for other purposes. Available on the West Coast and in Arizona, New Mexico, Idaho, Nevada and Montana.

GOOD

Wheatsworth (National Biscuit Co., NYC). 29¢ for 3½ lb. (8.3¢). Whole wheat of the fine bran type with some of the bran removed. Good, soft dough. Available nationally.

Victor (Crete Mills). 17¢ for 3 lb. (5.7¢). Labeled "Wheat Graham Flour," but actually whole wheat, not a true graham type, as bran over 20 mesh—usually large flakes—was rather small sized. Good, soft dough, but flour of only fair quality. Available in Northern States between Rocky Mountains and Mississippi River.

Franklin Mills (Franklin Mills Co., Batavia, N. Y.). 38¢ for 5 lb. (7.6¢). Labeled "Entire wheat with part of the bran removed." But actually not a true whole wheat; had too little bran and too much flour. Made from hard wheat with high protein content. Flour too strong and tough. Fair dough quality.

FAIR

Gold Seal (American Stores). 16¢ for 2 lb. (8¢). Whole wheat of the fine bran type. Made from hard wheat with high protein content, which makes flour too strong and tough. Good, strong dough. Available nationally at American Stores.

NOT ACCEPTABLE

Fisher's 100% Whole Wheat (Fisher Flouring Mills). 17¢ for 2 lb. (8.5¢). Low grade, off type; bran too fine for a true whole wheat. Fair, strong dough, but bread rather heavy with undesirable grain and texture.

Victor (The Crete Mills). 15¢ for 3 lb. (5¢). Labeled "Whole Wheat Flour," but excess of bran over whole wheat makes this flour off-grade; probably not true whole wheat. Flavor and color poor.

SOYA FLOURS

ACCEPTABLE

EXCELLENT

Mellow Soy Flour (Loma Linda Food Co., Arlington, Calif.). 28¢ for 1½ lb. (18.6¢). Whole soya flour, full-fat type. Very good, nutty flavor. Available nationally.

GOOD

Vee-Bee (Vee-Bee Co., Chicago). 23¢ for 2 lb. (11.5¢). Whole soya flour, defatted. Good, nutty flavor.

Co-op Soy Bean Flour (Eastern Cooperative Wholesale, Inc., NYC). 19¢ for 1½ lb. (12.6¢). Whole soya flour, full-fat type. Good, nutty flavor. Available in Eastern States from Maine to Maryland at Co-op Stores.

FAIR

Stoy (A. E. Staley Mfg. Co., Decatur, Ill.). 15¢ for 1 lb. (15¢). Whole soya flour, defatted. Flavor slightly "beany" but not bitter. Available nationally.

Durkee's Soyarich Flour (Durkee Famous Foods, Elmhurst, L. I.). 19¢ for 14 oz. (21.7¢). Whole soya flour, full-

fat. Fair, "beany" flavor. Available in NYC, Minneapolis, Pittsburgh, and Portland, Me.

NOT ACCEPTABLE

Sycora (Soya Corp. of America, NYC). 19¢ for 8 oz. (38¢). Whole soya flour, full-fat. Generally poor with little flavor.

RYE FLOURS

ACCEPTABLE

EXCELLENT

Co-op (National Co-operatives, Inc.). 31¢ for 5 lb. (6.2¢). Loaf had a light, fine texture, cream-gray in color. Available nationally at Co-op Stores.

GOOD

Washburn's Gold Medal Cream of Rye (General Mills). 21¢ for 3½ lb. (6¢). Labeled "Bleached Rye." Made a good loaf, cream-brown in color. Available nationally.

GLUTEN FLOUR

Gluten flour, rich in protein and low in carbohydrates, is made by removing a large part of the starch from wheat flour. It is useful in the diet of diabetic persons. The following gluten flour, judged on the basis of moisture, ash and protein content as well as color, volume rise, texture, grain and flavor, was considered "Excellent."

Macy's Lily White (R. H. Macy & Co., Inc., NYC). 48¢ for 5 lb. (9.6¢). Available in NYC at Macy's Dep't Store.

Watch for . . .

Work on the following reports, among others, is either now under way or scheduled to begin soon:

Toilet Soap

Dentifrices

Clinical Thermometers

Paper Towels

Canned Salmon

Tuna Fish

Tomato & Grapefruit Juice

Flameproofing Fabrics

Knitting Yarn

Women's Slips

For Greener Grass

Some notes on what you should do both now and during the rest of the year so that your lawn will be green and smooth

Greener grass will greet you in the Spring if you can devote some time to well-planned lawn care in the early Fall. Even if your lawn has fundamental faults of soil composition and drainage, you needn't abandon it to progressive destruction just because shortages of labor, fertilizers and some kinds of seed make a complete rebuilding job impossible this year. For no matter what is causing the turf to spoil, it can be improved by surface treatment and by exchanging bad cultural practices in rolling, watering and mowing for good ones.

On old lawns which have been thriving in the past and are still 30% to 40% covered with permanent lawn grasses, you can probably produce an excellent turf by merely fertilizing and perhaps liming the soil, and by scratching the right kind of seed into sparse areas. If a year-old lawn on good soil is full of weeds and coarse grass, the trouble may be due to a poor lawn-seed mixture or to sowing at the wrong time of year. In this case, turning the soil, preparing a fine seed-bed and sowing with good seed in the Fall should do the trick without more drastic corrective measures. And any lawn infested with Japanese beetles will be encouraged by a prompt and vigorous campaign against the grubs.

FALL SURFACE TREATMENT

Fall is the best time for seeding—from mid-August to October, depending upon the climate, the farther North, the earlier. The first half of September is best from New York to Omaha and from the District of Columbia to Kansas City. If there has been a late drought, wait until the ground is moist from the Fall rains to avoid the necessity of watering, which may wash out the seeds. If watering is necessary—the seed must not be allowed to dry out—use the finest spray.

Here is a good procedure to follow if the lawn does not require turning and complete reseeding:

REMOVE WEEDS. Dig or rake out crab grass by early August, to prevent seeding. Cut off crowns of dandelions

and apply a big pinch of nitrate of soda (the preferred treatment) or two to three drops of gasoline to each root. Rake out dead grass and debris. *Never burn the lawn!*

LIME THE SOIL if a test shows that it is very acid. Use the amount recommended for vegetable gardens in your locality.

FIGHT JAPANESE BEETLE GRUBS. For a heavy infestation, broadcast 10 to 20 pounds of lead arsenate, mixed with sifted loam or sand for easy application, to each 1000 square feet. Or use at the eight-pound rate, and when grubs reappear use *Japidemic*. For light infestations, inoculate in the Spring with *Japidemic* (see ratings).

FERTILIZE. Poultry manure is best if you can get it (see ratings). Lime and fertilizer may be applied in one operation. Lead arsenate may also be applied with fertilizer, but not with lime.

MOW closely to reveal thin spots, and fill depressions with topsoil or compost mixed with topsoil. Roll lightly.

RAKE with an iron rake and sow seed in still air, two to three pounds per 1000 square feet, depending on the sparseness of the existing turf. Divide the seed into two parts; sow lengthwise and then crosswise. Rake lightly to cover about 80% of the seed not more than $\frac{1}{4}$ inch deep, and roll lightly. Rolling hastens germination and growth of seedlings.

RESEEDING BARE SPOTS

If a part of the lawn is very thin or bare, it must be made over like a new lawn. To achieve a good seed bed—finely pulverized, mellow soil is essential—spade in deeply 16 pounds of superphosphate or 25 pounds of bone meal per 1000 square feet, and a liberal amount of manure or compost if you can get it. If the soil is very clayey or acid, apply limestone. (Superphosphate, manure and lime may be applied in one operation.) Roll with a fairly heavy roller to show up uneven places which require smoothing.

If the lawn was severely injured by Japanese beetle grubs, broadcast 10 to 20 pounds of lead arsenate per 1000 square feet. At this rate the effect will last for several years. If manure or compost was not used, broadcast either (1) *Milorganite* or other activated sewage sludge combined with muriate of potash, or (2) fish bone meal combined with muriate of potash or (3) castor pomace. These can be applied with the lead arsenate. Rake in with an iron rake, and finish the seed bed with a wooden rake held lightly so that only a little of its weight bears on the soil. Seed evenly, rake in lightly, and roll.

MANURES AND FERTILIZERS

BEST BUYS

Poultry Manure, fresh or dry. \$2.50 for 100 lb. dry. Probably the best. Apply several days before seeding, 60 lb. fresh or 30 lb. dry per 1000 sq. ft. Run lawn mower over it to pulverize, and wet down with the hose. May be applied early in the Fall; even heavy applications will not burn turf. Repeat in Spring and early Summer.

Milorganite (activated sewage sludge). \$3.75 for 100 lb. 6-2-0. Use 15 to 25 lb. per 1000 sq. ft., supplemented with 1 to 1½ lb. muriate of potash. Summer applications sometimes have a disagreeable odor if followed by humid weather without rain. Available under this name from the Milwaukee Sewage Commission, Milwaukee, Wisc. Similar products are put out by other cities, and may be available locally either free or at low cost.

Castor Pomace, 5-1½-1. Seedsmen can get this for you even if they do not list it. Use 21 lb. per 1000 sq. ft. In Spring supplement with 5 lb. nitrate of soda or 10 lb. dried blood per 1000 sq. ft.

Compost. Fine compost is excellent for top dressing, ¼ inch deep, or for raking in deeply when preparing a new lawn.

ACCEPTABLE

Fish Meal. \$6 for 100 lb. Variable in quality and analysis. Apply 12 lb. per 1000 sq. ft. with 1 lb. muriate of potash.

Scott's Turf Builder, 10-6-4. \$6.50 for 100 lb. Other special lawn mixtures having a high first figure (nitrogen) in the analysis may be substituted. Contains too high a proportion of inorganic fertilizer to be very good for lawns except in Spring applications when a quick start is desirable. Use 8 lb. per 1000 sq. ft.

Horse or Cow Manure. Excellent for

spading in deeply when preparing a new lawn, but not good for surface application because of high weed content.

NOT ACCEPTABLE

Bone Meal. Poor as a surface application, but may be mixed with soil in large quantities (20 to 25 lbs. per 1000 sq. ft.) when seeding a new lawn. Very low in nitrogen.

Sheep Manure, 2-1-2. Too low in plant food and contains a great many weed seeds. Definitely harmful.

Organo. When this is used over a long period, the results are poor.

Victory Garden Fertilizer. Not good except for early Spring application, as the nitrogen is all quick-acting, and is too soon exhausted.

FOR JAPANESE BEETLE GRUBS

Japidemic (J. A. Ditmar, Star Route, Laurel, Md.; distributed by Peter Henderson, 35 Cortlandt St., NYC and F. W. Bolgiano & Co., 411 New York Ave., N.E., Washington, D.C.). \$5 for 1 lb. Milky disease spore dust (talc impregnated with pulverized bodies of infected grubs), introduced by the U.S. Dep't of Agriculture and States having infected areas. Supply is limited because no artificial medium has been discovered for propagation of the bacillus. **Japidemic** is not a remedy against the adult beetle; do not use on cultivated soil where grubs are rarely found. Use on lawns only when there are more than four grubs per sq. ft. (see text for time and technique of application). Usual rate of application is 1½ lb. per acre (one level teaspoonful every 10 feet). At this rate results are seen after three years. At five-foot intervals (7 lb. per acre) results appear sooner, but an excessive amount is required.

WATERING

Except for Bent grass, which always needs a great deal of moisture, good mature turf on loam or clay soil can survive protracted drought without any watering, unless it has been cut too short. Without water, Kentucky Blue grass browns badly, but it revives with the Fall rains. On sandy soil, however, any kind of grass is likely to be killed by dry weather.

Though watering is not always essential to keep the grass alive, it is useful for another reason. Weeds thrive in drought at the expense of lawn grasses, so that if the lawn is to be green in the Summer, it must be watered carefully.

The amount and frequency of watering required is determined by the type of soil, the height of cut, the exposure of the lawn, the temperature and the rainfall. There is no general rule for watering lawns, except the universal gardening rule: *soak, don't sprinkle*.

Moisture is conserved by cutting the grass 1½ or 2 inches high (the higher the better), so that the grass acts as a mulch for the soil. Besides reducing evaporation, a high cut encourages the roots to go deep for water.

Soils vary in their ability to absorb and hold water. A lawn facing south loses moisture quickly, through evaporation; steep banks do not absorb much water because of excessive runoff.

The time to begin watering comes earlier in the Spring than many people realize. Don't wait until the grass withers; when a week or so has passed without rain, examine the soil to see how much it has dried. To do this, cut out a deep plug of sod with a knife or trowel. If the upper inch is dry, it is time to water. It is easy to replace moisture to that depth, but very hard to put it deeper.

Different parts of the lawn may require different amounts of moisture; the trick is to see that the soil is moistened as deep as the dryness occurs, whether it is one inch or four. Try to water each area often enough so that the dryness never goes deeper than one inch. The length of time to run the sprinkler can be determined by examining a plug of soil occasionally during watering. Unless you have a sprinkler that delivers a uniform amount of water over the entire area it covers, overlap the wetted areas. For uneven surfaces, a *Soil-Soaker* hose is useful (see the *Reports*, July 1944). Lay it along the top of the slope and let the water seep down very slowly.

Contrary to popular belief, watering may be done at any time during the day or night.

THE BASIC GRASSES

The type of grass you choose should depend upon climate and soil conditions in your locality, the use for which the turf is intended and the amount of care you can give your lawn. The three basic grasses most used above the Mason and Dixon Line are Kentucky Blue Grass, Chewings Fescue and Colonial Bent. Rough stalked Meadow Grass, which has been widely used for shaded

lawns, is not being imported during the war.

KENTUCKY BLUE GRASS is the best for average conditions and is widely adaptable. This is the grass with the boat-shaped tip, folded in the bud. It requires the greatest amount of food, is least tolerant of acid soil, is slow in germinating and getting established, and must not be cut too close. But it makes thick turf under suitable conditions, droughts seldom do worse than brown it temporarily and it starts early in the Spring. It mixes well with Colonial Bent.

CHEWINGS NEW ZEALAND FESCUE has an even wider range of adaptability. It is tolerant of shade and will make turf on soils too poor or sandy to support Kentucky Blue Grass. The leaf is fine, very tough in dry, sunny locations, and stands hard usage on playing fields. But it usually looks bunchy, is hard to cut with a hand mower, does not tolerate close cutting where Summers are very hot and doesn't combine well with Kentucky Blue Grass and bents. *It is not satisfactory for average lawn use.*

COLONIAL BENT (Astoria, Oregon, Prince Edward Island, Rhode Island strains) is a fine-textured grass, tapering to a sharp point and rolled in the bud, which makes beautiful lawns. It is fairly tolerant of shade, acid soil and rather low fertility; but it is slow to start in the Spring, does not endure drought, and small patches may die of brown patch disease in warm, humid weather. It prefers heavy soils and moisture, but with special care it can be grown over a wide area. Not well adapted to conditions in the South, it is best in New England, New York, Washington and Northern Oregon. If it is given the right conditions there is no lawn equal to a pure, bent-grass lawn, but it is not recommended for the average person who cannot always water during droughts, and give the continuous good care required. Colonial Bent is often combined with Kentucky Blue Grass, and for shaded lawns it is used with Chewings Fescue.

CLOVER in small amounts (less than 5% of a mixture) will help supply the soil with nitrogen which is manufactured by clover plants. But it spoils the appearance of the turf. Besides, walking over it in hot weather leaves a trail, and it is too slippery for a lawn which is to be used for

games. If you use it, buy only Wild White, not ordinary Dutch clover which is not permanent.

MIX YOUR OWN

Whichever type of seed you decide to sow, either on a new lawn or on bare spots which require patching, it is usually far better to buy individual grass varieties and mix them yourself than to buy the best commercial mixtures on the market. Regardless of whether or not their germination is good, mixtures sold in the average, "reputable" seed store are poor because they contain too little basic (permanent) lawn grass seed, too much nurse grass, filler and sometimes special-purpose grass seed put in to increase bulk and lower the price of the mixture. And they usually contain a high proportion of weed seeds, which should be less than one-half of one percent of the total bulk. Filler grasses, not good for any sort of lawn, and special-purpose grasses, not suitable for your particular location, either die and leave room for weeds, or are too coarse. The quick-growing nurse grasses (red top or rye grass) whose function it is to act as "shock troops" against weeds, must die as soon as the basic grasses need their space, so no more than necessary should be used. Beware of "domestic" and "perennial" rye grass. The domestic variety does not live long enough; the perennial lives too long. Pure Italian rye grass is the best kind to use.

For Fall patching buy a pound of pure Kentucky Blue Grass or whatever is the dominant grass in your lawn, for if you do your patching with a mixture from the nearest hardware store your lawn will steadily deteriorate. A pure, basic grass seed, sown more thinly than is required for mixtures, is the best buy because you pay only for the permanent lawn grass. But if you need only a pound or so of seed for patching in the Spring and find it most convenient to piece out with a mixture, be sure to buy a high-grade one. A cheap mixture is too expensive at any price.

Store left-over seed in a cool, dry place (40° F. is ideal). If you buy from dealers having poor storage facilities (most hardware stores, 10¢ stores and department stores) you may find that the seed germinates poorly.

Your state Experiment Station will advise on grass mixtures suited to local conditions, but here are a few

suggestions. Parts are by weight, and rates of seeding are per 1000 sq. ft.

1. Best for average conditions everywhere except in the extreme South and the least expensive (Rate, $3\frac{1}{2}$ lb.):

Kentucky Blue Grass.....	4 parts
Red Top (omit for Fall seeding north of Philadelphia	1 part

Do not expect very thick turf until the third year. A Kentucky Blue Grass lawn must be well fertilized, limed when necessary and cut no closer than one inch.

2. Where bents are successful (Rate, $3\frac{1}{2}$ lb.):

Kentucky Blue Grass.....	5 parts
Colonial Bents	1 part
Red Top (for Spring seeding only)	1 part

3. For shady areas (Rate, $3\frac{1}{2}$ lb.): Chewings New Zealand

Fescue	6 parts
Colonial Bent	1 part
Red Top (omit north of Philadelphia in the Fall) ..	2 parts

If the shade is dense, do not expect a lawn to succeed. Use a ground cover like Pachysandra, or be satisfied with green tufts of Fine Leaved Fescue at 8 lbs. per 1000 sq. ft.

4. For terraces and clayey, shaly or sandy soil. (Rate, 4 lb.):

Chewings New Zealand	
Fescue	4 parts
Kentucky Blue Grass.....	1 part
Colonial Bent (in favorable sections)	1 part
Perennial Rye Grass.....	1 part
Red Top	1 part
Wild White Clover (optional)	less than $\frac{1}{2}$ part

This turf is hard to mow by hand.

For steeply terraced slopes consider a ground cover like Hall's Honeysuckle instead of grass. Good looking and much less care.

5. For finest-quality turf, most likely to succeed in New England, New York, Washington and northern Oregon, with good care (Rate, $2\frac{1}{2}$ lb.):

Colonial Bent	4 parts
Red Top	1 part

6. A play lawn—hard to mow by hand (Rate, 4 lb.):

Chewings New Zealand	
Fescue	1 part
Kentucky Blue Grass.....	3 parts
Red Top (omit for Fall seeding north of Philadelphia)	1 part

No grass is tough when young. Refrain from hard usage until after the second year.

READ THE LABELS

INDIVIDUAL GRASS VARIETIES must show on every package the purity and germination guarantee required by law in every state except Rhode Island. These figures do not appear in many catalogs, but they are very important to consumers. "Kentucky Blue Grass 90-85" indicates a content of 90% pure seed with 85% germination. Many seedsmen list one variety in two or three grades. Usually the best grade (sometimes listed "for specialists") is the best buy. Before deciding, read the labels and do a little arithmetic. Obviously a 70-70 grade should not cost more than 60% of the price of the 90-90 grade. Kentucky Blue Grass is also graded by weight per bushel; the best weight to buy is 24 pounds.

MIXTURES are much harder to judge by their labels, which usually tell the names of all grasses in excess of 5% by weight; and the percent of inert matter, other commercial seeds, weed seeds and germination. But percent of germination is for the whole mixture, and a little basic grass seed of low germination with a lot of Red Top nurse grass, which usually has high germination but dies out soon, gives an excellent average for a worthless mixture.

The most recent seed inspection bulletin of your State Agricultural Experiment Station is the best source of information about grass seed. You can get a copy by sending a request to your State Agricultural College even if it is not listed with available publications. Though the figures in the seed analyses are not clear in all respects, you can see that O. M. Scott's "Mixture for Sunny Lawns," for example, with 64% Kentucky Blue Grass (germination 80%), 7.8% Colonial Bent (germination 85%), only 0.05% weed seed and 1.18% inert matter is much better than Sears Roebuck's "Park Lawn Seed Mixture" with only 35% Kentucky Blue Grass (germination 66%), weed seed 0.53% and inert matter over 10%. But note that Scott's mixture contains Colonial Bent, an expensive grass which fails in many sections of the country.

GRASS SEED

RECOMMENDED SOURCES

Golf Course Supply Houses. Ask the greenkeeper of your golf club where he buys seed. Buy individual varieties, not the mixtures sometimes stocked

by such houses for the general public. O. M. Scott & Sons Co., Marysville, Ohio. For both individual varieties and mixtures. The mixtures put up by this company under its own brand names are probably the best having a national sale. If you buy other, private brands—there may be some as good or better—read labels and compare with the analysis of Scott's given in text.

Montgomery Ward. For individual varieties and O. M. Scott & Sons mixtures, but not Ward's own mixtures.

Sears, Roebuck. For individual varieties, not for mixtures.

Stumpf & Walter, Dreer, Vaughan and other good general seedsmen for individual varieties, but seldom for mixtures which usually contain too little basic grass seed. Read guarantees carefully.

New Jersey Formulas. Many seedsmen are offering mixtures prepared according to formulas recommended by the New Jersey Experiment Station. The Station, in an effort to raise the standard for commercial mixtures, recommends formulas only, and not the particular lot of seed offered by any firm or dealer. These formulas are much better than the average, but not the best obtainable. For example, the "Standard Mixture" contains 40% nurse grass, altogether too much for any purpose.

DIAGNOSING AND CORRECTION OF FAULTS

Very often lawns suffer from fundamental faults of construction. If the structure of the soil is faulty, if the soil has an unsatisfactory texture or if the lawn is poorly drained, we suggest that you postpone turning and reseeding until these faults can be corrected. See how the grass responds to surface treatment this Fall and to correct methods in year-round care (see box). If results are still unsatisfactory, make it your business to find out just what the trouble is so that when reconstruction materials are again available you can do the job right. Diagnosis should be along the lines indicated below.

SOIL STRUCTURE

Natural soil is made of (1) the foundation—rock, gravel, sand, clay or hardpan; (2) the subsoil—that infertile earth next above, which receives surplus water from the topsoil, stores it and gives it back again by capillarity; (3) the topsoil from which the grass obtains its food.

Grading operations too often disturb this natural structure of the soil

so that many a lawn is made on a thin layer of loam over a thin subsoil, or even directly over the foundation with no subsoil at all. For really good turf with low upkeep costs such a lawn must be rebuilt by replacing some of the foundation with subsoil of the right type and thickness. The greater the distance of the foundation below the topsoil, the less its effect on turf grasses.

SUBSOIL OVER VARIOUS FOUNDATIONS

The natural subsoil over sand should be 10 inches thick, but four to six inches of tamped, hard-coal ashes or two inches of lumpy clay will make a good artificial subsoil. Over gravel which drains away all the water and plant food that reach it, the natural subsoil should be 12 to 16 inches thick, but a thinner layer of clay will do. The natural subsoil over rock should be very thick—16 to 18 inches for a light clay subsoil. Rock too near the surface either drains all the water off or holds it in an impervious basin. To correct excessive drying of the soil, a rock foundation can be capped with clay to a depth of six inches. If rock holds the water, breaking it down and cracking it—even blasting—may be necessary.

A clay foundation needs eight inches of fine, gravelly subsoil or 16 inches of heavier subsoil. Often it needs tile drainage. Hardpan is usually sloped so that it drains well.

Building debris makes a very poor subsoil because it checks the flow of water in one place and drains it off too fast in another. It should be replaced with good subsoil of the right character and depth for the foundation.

When grading, the upper surface of the subsoil should be left parallel to the line of the finished grade, so that the topsoil will be of even depth (four to five inches is enough if the subsoil is right).

TOPSOIL

The physical texture of topsoil is more important than its fertility which is easily built up. Ideal topsoil has the following characteristics: (1) It readily absorbs rain and passes the surplus on to the subsoil; (2) it does not become packed or tight, thus excluding air from the roots and causing too great a surface run-off of water; (3) its structure is crumbly.

A sandy loam answers these requirements, but poor texture can be improved by mixing in soil of oppo-

site type. Heavy clay soil is improved by mixing in two inches of coarse, sharp sand. The application of limestone and large amounts of organic matter also helps. Sandy soil is improved by adding about one inch of clay soil and a large amount of organic matter. If the soil is of good texture but is low in organic matter, green manuring is a great help. The grass itself will attend to this over a longer period by shedding some of its roots every time it is mowed. The better it is fertilized, the faster it grows and the more roots it sheds.

To identify your soil type, thoroughly wet a sample and roll it into a ball, using as little pressure as possible. Let it dry, then drop it onto a hard surface from a height of three feet. If it does not break it is too clayey; if it goes all to pieces or crumbles in the hand it is too sandy; but if it crumbles readily when dropped it has good physical texture.

From the Members

In a preface to an article on Frigidity in last month's *Reports* we asked CU members to write in and let us know how they felt about the publication of such material in the *Reports* during the Summer, when the *Reports* are not used for classroom work. Members will be interested to know that those who responded are in complete accord with the policy expressed through the printing of that article. Typical of many are the following excerpts:

"I would appreciate more articles on similar subjects in the future. We have no trouble finding books, but we can never tell whether dependency can be placed in them . . ."

"I'd like to say that articles of this nature are very desirable and most important. Ignorance is the curse of mankind, and certainly does not promote happiness. . . ."

"I feel such material is most helpful and should appreciate more articles of a similar nature. . . ."

"An excellent article, *Frigidity*, and let's have more of this nature. . . ."

In view of the overwhelmingly favorable reaction of CU members the CU Medical Department will plan articles of similar nature for future Summer issues.

Year-Round Lawn Tips

FALL is the time for diagnosis and treatment of serious and not-so-serious ailments, for seeding new lawns and patching old ones.

- Apply organic fertilizer early in September even to an apparently healthy lawn.
- Give grass its final mowing a week before growth normally stops.

For routine Fall mowing, lift the lawn-mower knife half an inch above Summer height. Two and a half inches is none too high. On some mowers the rollers cannot be lowered enough for the best height of cut. If you cannot buy a thicker roller, wind a half-inch rope smoothly around your old one. Before cutting new grass, which should not be mowed until it is at least three inches high, set the mower as high as possible so that it clips off only the tips of the grass blades. The mower must be sharp, otherwise it may pull out tender young plants. Always leave clippings on the lawn, and mow often enough so that clippings will not mat. If they do lie in mats after 36 hours, scatter the clippings to break up the mats, but do not rake the lawn. The last mowing of the season should be made about a week before the grass stops growing—about the first week in October around New York. Don't let leaves stay on the lawn all Winter. They cause Winter killing.

TO GET RID OF MOLES: Open the runway and drop in one teaspoonful of carbon disulfide every six feet, or one teaspoonful of lye every four or five feet. Seal each hole with damp earth, but do not press down.

WINTER will not harm the lawn if you avoid making paths across it; even if made in snow, tracks may show until June.

- Don't mulch a lawn; leaves allowed to stay on the lawn all Winter actually cause Winter killing.

SPRING traditionally brings out the lawn roller which is often used with too heavy a hand. Rolling *once only* with a light roller is enough to press back grass crowns heaved by the Winter, and many level lawns need no rolling at all. Soil must be moist when you roll, but not so wet that water seeps into your footprints.

- Level humps by removing soil from underneath sections of lifted soil, not by rolling. Fill hollows by lifting the sod and adding soil underneath.

- Patching of winterkilled spots should be done by April 1. Dry the soil first by roughing the surface, and sow seed early even though killing by late frosts may necessitate re-sowing. Weed competition and dry weather make late seeding undesirable.
- "No trespassing!" on turf covered with white frost! Tracks will show for weeks and may become bare spots during Summer heat.
- Remove debris by combing with an iron rake as soon as the ground is dry, but take care not to tear out grass plants. *Never burn the grass!*
- For thicker turf, fertilize as soon as new grass has hardened. Apply when grass is dry, and water in. Since well-fed trees rob grass less completely, make 18-inch-deep holes 18 inches apart, using a stake or a crowbar, in a rough circle under the outer limbs of the branches and fill them with a complete fertilizer.
- Set the mower high for the first mowing of the season.
- If *Japidemic* is needed, apply it by late Spring.
- Attack perennial weeds early!

SUMMER makes heavy demands on the lawn mower. Use it often enough to prevent matting of clippings which should be left on the lawn to supply the soil with nitrogen. For a thick turf of Kentucky Blue Grass, cut no shorter than one inch at any time. During hot, dry weather no lawn should be cut shorter than two inches, and grass under trees should always be cut high. But don't stop mowing or weeds will go to seed.

- June 1 is the time for more fertilizer.
- Hand-pull crab grass before it goes to seed, or rake its flat stalks upward after mowing and mow again. Crab grass can be crowded out by good grass; whenever a weed is pulled sow grass seed in its place.
- Colonial Bent *must* be watered during dry spells. Soak, don't sprinkle (for watering technique see the *Reports*, July 1944).
- To control brown patch disease, characterized by rapid wilting and browning in well-defined areas, sweep the spots vigorously in the very early morning. Bent grasses may be attacked suddenly in warm, humid weather.

HEALTH AND MEDICINE

HAROLD AARON, M. D., SPECIAL MEDICAL ADVISER

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CU's Medical Consultants give technical advice on matters of medicine which lie within their fields. CU is responsible for all opinions concerning social, economic and public health questions.

Impotence

This is the second of a series of two articles by CU's Medical Adviser. The first, on Frigidity, appeared in the July Reports. As indicated last month, these articles are published during the Summer months because CU felt such material might best be included during the period when the Reports are not used in classroom work in the schools.

Impotence in the male can be considered the equivalent of frigidity in women. It almost always arises out of the same psychological difficulties responsible for frigidity in women; that is, a persistence into adult life of infantile theories, beliefs and fears regarding sex. Only rarely, as in disease of the spinal cord, is impotence due to physical causes. In the overwhelming majority of cases, the basic cause is psychological.

Impotence is more common than is generally realized. There are mild or temporary cases as well as severe or chronic cases. In both, there is a tendency to premature ejaculation. In severe cases, premature ejaculation may be the sole symptom, or it may appear in conjunction with a difficulty in achieving or maintaining erection before or during intercourse.

Premature ejaculation is common and normal among young men having their first sexual experience. Under such circumstances, it may be considered an expression of lack of confidence in sexual ability; it generally gives way to normal capacity after continued experience. Many men with normal potency will remember their first experience as a complete and embarrassing failure. When the anxiety to succeed is less, the performance improves.

A normal adult who has previously had adequate potency may experience premature ejaculation after prolonged abstinence. This is simply because the sexual tension is at a very high pitch at such times, and self-control becomes temporarily difficult or impossible.

Over-anxiety to succeed may be responsible for repeated failure, even though there may be no serious psychological reason for failure. This may occur when a man sets up standards of performance that are impossible to fulfill. Such ideals of virility are often set up by romantic stories, folk-lore or boasted performances of friends. Measuring his own abilities against the "ideals" leads to feelings of inferiority which, in turn, may make any performance impossible.

When such an individual stops worrying about impossible standards, and allows himself to perform in a manner normal for him, his potency returns. Satisfactory intercourse does not require any particular muscular or sexual strength; it simply requires normal desire plus self-confidence.

Often, sexual performance improves with experience. Thus, sexual relations between husband and wife may not be satisfactory during the first months of marriage. When, however, the partners learn to relax,

when they can stop worrying about whether their relationship measures up to preconceived notions, their sexual relationship improves. In this connection, it must be emphasized that particular techniques of intercourse are less important than the mental attitude toward sex.

A mental attitude that is rather prevalent, and is responsible for many cases of repeated failure in intercourse, is one that associates the act with a feeling of doing something wrong or forbidden. Such feelings are most often wholly unconscious; intellectually the man may recognize that intercourse is permissible, but he is inhibited from performing normally by a deeply-buried, repressed feeling which says, in effect, that the act is dangerous, and therefore forbidden.

Such unconscious attitudes toward sex have a history which begins in early childhood. Usually this history begins with parental attitudes toward masturbation. Uninformed parents very frequently impress upon infants and growing children the feeling that masturbation is evil and dangerous. Although all authorities now agree that masturbation in the early years is a normal and harmless expression of the child's developing sexual instinct, too many parents transfer their own feelings of guilt about sex to their attitude toward children. Children are taught that it is wrong not only to masturbate, but to even think about sex. Warnings are often accompanied by punishment, either physical or, even worse, in the form of a threat of loss of parental love.

The feeling that sexual interest or excitement is dangerous, inculcated in childhood, has its effects in later life. Even though a person may not consciously remember childhood training, he feels guilty and afraid when he begins to masturbate again in adolescence, or when he has his first heterosexual experience.

The belief that masturbation is harmful at any age is prevalent among persons of all classes and all levels of education. Although the act is in most cases harmless and a normal outlet for sexual tension, both boys and girls feel guilty about it and worry about immediate and remote consequences. Among horrors held up before them are "loss of manhood or womanhood," insanity, physical or mental deterioration, pimples, etc. That none of these is ever the result of masturbation has been known

by informed physicians for the last quarter of a century. Nevertheless, the feelings of guilt about sexual activity are so deeply imbedded during the impressionable years that the more scientific knowledge acquired later often fails to change the childhood attitudes.

The guilt feeling, even though wholly unconscious, is so influential that even in adult life, when sexual relations are consciously considered normal and wholesome, it often prevents normal satisfaction. A man may be in love with a woman and married to her, yet he may behave as though the sexual act were connected with a great danger; as though the gratification of desire might have serious consequences for him. The danger, of course, is not external; it is within himself. He behaves as though he were about to do a prohibited thing for which he dreads punishment, just as in childhood he abstained from touching his genitals because his parents punished him when he did so.

It cannot be emphasized too strongly that the fear of doing something wrong and forbidden is usually entirely unconscious. A man may be well educated and "broadminded" about sex; he may pride himself on his understanding of "human nature"; yet he may not be able to assert himself normally in the sexual relationship. In other words, the unconscious forces tend to overpower, in sexual and emotional relationships, the conscious relations of "pure reason."

In some cases of chronic sexual failure or impotence, there is not only a feeling of doing wrong, but an actual fear of women. It occurs particularly when a man's mother has been the sterner of the parents, and has administered punishment to him. If, in addition, the father has been weak and passive, or has not participated equally with the mother in the education of the child, the fear of women is increased. The boy's first knowledge of a man and woman living together (the parents) may thus come from an experience in which the woman has successfully dominated the man, and the child cannot realize that this is not the general rule in family behavior. When he grows up, he unconsciously sees in his wife a trace of his mother, and he is afraid of her. This makes relaxation during sexual intercourse impossible for him.

Another common childhood experience that may have a determining influence upon later sexual potency is the witnessing of sexual intercourse between the parents. To the child, this may appear to be an unequal struggle in which the woman is hurt. The impression, if it is unrelieved by intelligent education by the parents, persists in the child's feelings about sex, and it may affect potency in later life.

While childhood experience often has a determining and decisive effect upon future marital relationship, it is not the sole influence. Existing psychological, social and economic factors also play an important part.

Minor marital difficulties, for example, or problems connected with work, can influence sexual behavior.

Since in almost all cases impotence is psychological in origin, it is obvious that only psychological treatment can have any permanent effect. Aphrodisiacs such as alcohol may temporarily increase sexual excitement, but they can do nothing to increase potency or prevent premature ejaculation. Advertised products to "restore lost manhood," be they medicines or mechanical devices, are at best useless; they may be harmful. Endocrine or hormone preparations may give a temporary "lift" to sexual desire, but they are potentially dangerous when taken for prolonged periods, and have no permanent effect on the control of erection or orgasm.

As mentioned earlier, impotence and frigidity are parallel disorders in man and woman. And as with frigidity, few individuals suffering from impotence have sufficient insight into their own personalities and emotional makeup to effect a cure, particularly when the disorder is repeated or prolonged. The help of a psychiatrist is often necessary to determine wherein the fault lies. If it is largely in an existing situation or relationship, a simple discussion of the relevant factors may result in cure. But if the impotence is associated with neurotic symptoms or chronic anxieties, or if it is traceable to bad childhood training, prolonged psycho-therapy may be necessary before a cure is achieved.



DR. FRANK E. BEUBE

New Directors

New Directors elected to the Consumers Union Board of Directors for a three-year term as a result of the annual elections were Dr. Frank E. Beube and Dr. Emanuel Klein; Arthur Kallet and Bernard Reis were re-elected. The results of the balloting follow:

Elected

Dr. Frank E. Beube.....	3891 votes
Arthur Kallet	6209 votes
Dr. Emanuel Klein.....	3814 votes
Bernard Reis	5600 votes

Not Elected

Dr. Colter Rule.....	2409 votes
Mercedes Speir	2718 votes
W. A. Tippie.....	2558 votes



DR. EMANUEL KLEIN



A B C of *Cartels*

From a speech delivered at the Consumers Union Annual Meeting on June 30 by Dr. Corwin Edwards (left), specialist in cartels, U. S. State Department.

A cartel is a group of business enterprises formed for the purpose of avoiding some kinds of competition among themselves. Its members continue to do business separately for their own profit, but they act together in deciding such matters as the prices they are to charge, the amounts they are to produce or sell, and the share of the market which is to be regarded as the exclusive right of each of them.

In Germany and in some other European countries, the term *cartel* is often used to describe a domestic trade association which carries out this kind of program. In this country the word usually refers to groups which are organized internationally by the businessmen of two or more countries and which are used to prevent or limit competition in international trade.

Cartels sometimes undertake to lower their members' cost of doing business by various activities such as standardizing products or supplying statistical information; but such programs usually receive a minor part of the attention of cartel members.

COMBINES & CARTELS

A combine is a group of business enterprises which have been brought under a single control, so that they behave like one concern. The simplest form of combine is the holding company and its subsidiaries. In this kind of group one company, called the *parent* or the *holding company*, owns so much of the stock of various other companies, called the *subsidiaries*, that by voting this stock it can pick

the managers and control their decisions. Consequently, all of the companies act together whenever the people who control the holding company see an advantage in having them do so.

It is possible for combines to control companies which have been organized in several different countries. For example, General Aniline and Film Corporation was incorporated in this country but was controlled before the war by the concern which directly or indirectly held most of its stock, I. G. Farbenindustrie, of Germany.

International combines sometimes become very large, so that a single one of them may do most of the business in its own industry throughout the world. The organization of the combine usually prevents competition among the concerns which belong to it. In this sense, combines are alternatives to cartels. Moreover, when the number of independent companies in an industry has been greatly reduced by the organization of four or five combines, it is relatively easy for these large interests to form a cartel and thereby avoid competing with each other. When this happens cartels and combines supplement and re-enforce each other as ways of controlling an industry.

SUPPRESSION OF COMPETITION

The chief purpose of a cartel agreement is to increase the profits of the members of the cartel by reducing competition. There are many different ways to do this.

One of the simplest ways is for

the members of the cartel to agree upon the prices at which they will sell their goods, and thereby to avoid the price-cutting which often occurs in competition. But such price agreements, standing alone, are hard to maintain. A high price reduces sales, and companies with unsold goods upon their hands or with idle plant capacity are likely sooner or later to reduce prices in order to attract customers. Moreover, there are often some concerns which have not signed the cartel agreement, and if these independent companies sell at lower prices they may take enough business away from the cartel to oblige the cartel members to follow suit.

A second way of avoiding competition is to agree to restrict production, sales, or exports. The purpose of such an agreement is to reduce the amount offered for sale, so that the sellers will find it easier to maintain prices. Sometimes restriction of the supply is used to reinforce a price agreement, but sometimes it is used alone in the belief that with supply limited the price will remain high even without any formal decision to keep it so.

A third way of restricting competition is to assign some part of the market to each concern. There are several different ways of allocating markets. In some cases, each company will take a certain territory. In other cases, each company may be given the right to make certain goods which the other companies are pledged to avoid making. Occasionally customers may be assigned.

Agreements of this kind are often worked out in the form of simple contracts, in which the duties and rights of each company are specified. There have been instances, such as the pre-war control of rubber and tin, in which the governments of the principal producing countries have recognized cartels and given them support, either by appointing government officials to the group administering a cartel or by enacting laws which strengthened a cartel's authority over its members and protected it from competition by outsiders. For example, governments have occasionally enacted export taxes which made it difficult for members of a cartel to sell more abroad than the amount they had agreed upon.

Many cartels have been established by the use of patents. A patent is an exclusive right to use an invention, granted by a national government. The owner of the patent may allow others (licensees) to make use of it. Restrictions upon the kind or amount of products which a licensee may make, the territories in which he may sell, or the prices which he shall charge are often included in patent license agreements. When a single company controls so many patents that others cannot operate in the same industry without licenses, the conditions imposed in these licenses may prevent competition as effectively as a formal cartel agreement.

Moreover, since each nation's patents are valid only within its own boundaries, a single invention may be recognized by a series of separate patents taken out by the inventor in various countries; and in such cases the right to use the invention in each country may become the exclusive property of a different company which has bought that country's patent from the inventor or has obtained the sole license under it. If one company owns the British and American patents for one invention and a second company owns patents in the same two countries for another invention, they may exchange their patents so that one company controls both inventions in England and the other controls both in the United States.

Arrangements may be made between particular companies to exchange all patents which they now own and any which they may acquire in the future. Thus the markets of the world may be divided among the

business enterprises which take part in the plan, so that these enterprises no longer compete against each other; and other companies may be handicapped because they are not allowed to use any of the patents belonging to any member of the group.

FORCES LEADING TO CARTELIZATION

Businessmen usually take part in cartels because they wish to reduce competition. The desire to do this is wide-spread; for business is done for profit, and competition tends to limit the amount of the profit which can be made. Where cartels are taken for granted by public opinion and accepted by governments, business readily becomes cartelized. Where law and public opinion are opposed to cartels, many businessmen share the prevailing sentiment that such arrangements are bad for the community, and other businessmen who think differently often hesitate from motives of prudence to take part in the cartels.

There are certain typical situations in which cartels are peculiarly likely to appear:

The desire of powerful business enterprises to exchange inventions. When a concern has acquired special knowledge and skill in making a particular product, it usually patents the part of its knowledge which is patentable and keeps the rest as a trade secret. Ordinarily the total knowledge which would be useful in an industry is divided among various concerns which are operating there. Each is likely to want information from the others but to be unwilling that the others should use its own information to compete against it. Consequently in granting the right to use its patents and in giving others its secret information, each concern is likely to insist that the inventions thus made available shall not be used to make goods for sale in competition with it in its own markets. When inventions are being exchanged among several firms, their mutual insistence on such a principle results in an agreement to divide markets wherever possible and to set limits upon their competition with each other in markets which no one of them can be left free to occupy alone.

The desire of established industries to cope with threatened loss of markets. When improved processes have been developed, producers who use the older methods may lose

sales because they cannot make the improved product or may lose profits because the newer producers undersell them. When buyers change their buying habits, producers in some industries may find that the volume of goods they can sell is seriously reduced. When new plants have been built and old ones expanded too rapidly, all members of an industry, including those who have not taken part in the expansion, may be forced to struggle for a market which is too small to buy all that the producers wish to sell. Under circumstances like these, the profits and even the survival of a large part of an industry may be seriously threatened.

To protect themselves such industries may adopt cartel practices. The older producers may unite to drive the new ones into bankruptcy or may try to limit the speed of the newcomers' growth or may persuade them to sell at the old prices in spite of their lower costs. Prices may be fixed by general agreement or the available business may be divided in order to avoid the use of price-cutting as a means of competing for larger sales.

Patterns like these appear both in manufacturing industries and in industries producing primary products. However, the problems which create them are likely to be more severe for some commodities of agricultural origin than for manufacturing or for mineral production.

The pressure of distress is most wide-spread, both for agricultural industries and for other industries, in times of general business depression. The beginnings of depressions abound in efforts to organize cartels. In many cases, however, the members of an industry find themselves too helpless to counteract the effect of the decline of all business, and the cartel breaks down. Renewed efforts when a business revival has begun are more likely to succeed, and in such cases the cartel sometimes is credited by its members with an increase in prices and sales which is merely a consequence of better business conditions throughout the economy.

The desire of industries to cope with governmental trade barriers. In Europe after 1918 many business enterprises found themselves separated by a new national frontier from their previous markets. The commercial policies of the new governments often established tariffs and other barriers to trade at such frontiers, and thereby handicapped the older

concerns while encouraging the development of new ones within the national territory. The older business enterprises frequently sought to maintain their markets by making special price reductions upon foreign sales, sometimes supported by subsidies from their home governments. To escape from a struggle for markets which took the form of dumping goods abroad, raising tariffs, and increasing subsidies, concerns in some industries made international agreements by which they decided what parts of the European market should be allocated to each enterprise. Non-European concerns found it convenient to join a cartel in doing business in Europe, and in return for their admission consented to the extension of the agreement to cover some or all of their non-European markets.

The desire to maintain the exports of highly specialized countries. When a country's foreign trade supplies a large part of its national income and when most of its exports are produced by one or two industries, there is a strong national interest in the amounts which those industries sell abroad and the prices which they obtain. Employment at

home, the foreign exchange which pays for imported goods, and possibly even the taxes received by the government, depend upon these amounts and prices. If export prices fall, the government may encourage the exporters to join an international agreement to maintain prices. If foreign sales fluctuate in amount, similar encouragement may be given to an international plan for market sharing.

The desire of independent concerns to do business in cartelized markets. When a market is cartelized, members of the cartel are sometimes able to use their combined strength to organize boycotts against non-members. When foreign non-members are strong enough to take customers away from cartel members and to endanger the cartel's ability to maintain its prices, a government which has jurisdiction over a cartelized market sometimes comes to the rescue of the cartel by establishing tariffs, controls over foreign exchange, or other regulations designed to exclude the independent concern from the market. Under these pressures a business enterprise may join a cartel in order to do business in a cartelized area without being harassed.

ments, if aid is considered necessary. Among them are direct grants of money, loans and technical help to encourage transfers of resources to other industries, devices by which surplus products are bought by governments for distribution to people who would otherwise be too poor to obtain them, and various other measures.

The relation of cartels to the international balance of trade:

To varying degrees, countries which depend largely upon their export trade have a national interest in maintaining the position of their export industries. They are interested both in a large volume of exports and in higher export prices. The businessmen of these industries may receive encouragement from their governments in fixing prices through cartels or in agreeing upon a division of markets which gives them a guaranteed amount of exports. But though such a program may serve the interests of the producer in one country, it usually does so at the expense of consumers elsewhere. Moreover, the general use of such devices in various industries in other countries must mean that the first country pays higher prices for its imports and therefore needs foreign exchange more than ever. Furthermore, a cartel system is likely to retard the rise of new industries within the country, both because the people whom the cartel protects have less incentive to seek a new occupation and because foreign cartels which control other industries will often use their power to prevent the appearance of new competitors. For this reason the cartel system makes it difficult for a country to escape from its dependence upon one or a few industries by developing new types of activity.

The relation of cartels to commercial policy:

One of the most important policy questions which each nation decides is the degree of encouragement it shall give to the imports of foreign goods and to the exports of domestic products. Decisions about these matters are expressed in tariffs, export and import quotas, export subsidies, and similar regulations. Although no nation today follows a foreign trade policy which is wholly free from restrictions, there has been a growing belief that the barriers to international trade which have been built up by the laws of the various nations in

Problems Raised by Cartels

National governments cannot ignore cartels. Among the problems of public policy which are raised by cartels are:

The relation between cartel restrictions and the effort to increase standards of living throughout the world:

In so far as a cartel limits production it directly diminishes the supply of goods and services available for human use. It tends to decrease consumption by making commodities less plentiful and higher priced. It tends to diminish employment because fewer people are needed to make the reduced amount of goods. So far as a cartel keeps prices higher than they would otherwise have been, consumption of the cartelized commodity is likely to be reduced and production is likely to fall even if the cartel does not limit output directly.

The relation between cartel restrictions and the effort to relieve the distress of producing groups:

In a system of free private enterprise the inducement to business concerns to keep themselves efficient is

the danger that otherwise their costs will rise and their profits will decline. Similarly, if they find themselves in an industry which tends to produce more than it can sell, they are encouraged to transfer their resources to some other industry by the fact that their prices and profits decrease. Chances for prices to fall as well as rise and for businessmen to lose money as well as make it are necessary to make the business system work well.

When cartel restrictions intended to maintain prices or limit output or divide markets are used by a distressed group to lighten its burden, such remedies usually retard the transfer of resources out of the distressed industry and thus preserve the condition which created the distress. Moreover, the gain of the members of the cartel comes at the expense of those who buy its products and of its employees, whether or not these other groups are best able to bear the burden.

There are more desirable ways of cushioning the shock of such adjust-

the last two decades have been excessive and unwise.

National policies about foreign trade are sometimes made ineffective by the private policies of international cartels. A tariff which admits foreign goods without discrimination in favor of any country may be ineffective because of a cartel agreement which assigns the national market exclusively to the producers of one foreign country. A cartel agreement which reserves the domestic market for a domestic producer may have the same effect as a prohibitory tariff, even though the government may have refused to enact such a tariff. A government's refusal to place a quota upon imports or exports may be nullified in practice by a cartel's decision to include such a quota in an international agreement.

It is obvious that national policies must not be overridden by conflicting private policies. Ways of preventing cartels from thwarting the commercial policies of government must be found.

The relation of cartels to industrial progress:

The exchange of ideas and inventions is essential to progress. Cartel agreements have often included arrangements between business enterprises to make such exchanges. Thereby research has advanced more rapidly than would have been possible if each enterprise had kept its inventions secret or prevented others from using them. But the industrial improvements have sometimes been delayed by cartels in order to protect the capital values of existing plants. Furthermore, the program to exchange information has often been entangled with a program to fix prices, and access to the information has often been confined to companies which are members of the cartel.

The relation of cartels to national security:

The strength of the state in time of war depends largely upon the vigorous development of its industries during peace. Experience during the last decade has shown that cartels can sometimes be used by an aggressive government to retard the industrial development of other nations.

FUTURE POLICY

Several important questions of policy toward cartels await decision.

The first of these is whether our future handling of the cartel problem shall depend, as heretofore, exclusively upon our own governmental machinery, or whether we shall join with other nations in working out a common program of action and putting it into effect by cooperative means.

An intermediate course of action is possible in which we and other countries would act together in dealing with parts of the problem about which we agree, but would reserve our freedom to follow different policies in other respects. For example, agreement might be reached to forbid cartels to restrict production, but the different countries might disagree about whether or not cartels should be permitted to withhold the research of their members from use by non-members. The latter question would then be dealt with by each country in accord with its own policies.

Closely related to the question of whether we act alone is the question as to the direction of our future policy. Diverse opinions as to future policy toward cartels are being advanced by private groups here and abroad. They include complete abolition of cartels, regulation of the structure and practices of such groups, and active fostering of cartels as the typical method of organizing post-war international commerce.

In developing our post-war policy, we must decide not only the general direction of our program, but also whether there are to be any exceptions to it and, if so, in what fields. Among the industries for which claims to exception must be examined are international transportation and communication industries, such as aviation, shipping, cable, and radio, some of which are regulated domestically as public utilities; industries bearing upon military security, such as munitions; industries in which a natural resource may soon be exhausted, such as certain minerals; industries which are limited in size and regulated in order to protect public health and morals, such as the production and sale of narcotics; and certain industries producing agricultural commodities which sometimes suffer from market fluctuations so severe as to cause wide-spread distress. If it is decided that the special circum-

Government Policy

The governments of the world have followed several divergent policies in dealing with cartels.

The policy of the United States as expressed in the Sherman Act and the Webb-Pomerene Act has been to prevent combinations in restraint of trade which affect the American domestic market or which impose restrictions upon American exporters against their will. However, subject to these limits, American exporters are free to combine with each other under the supervision of the Federal Trade Commission when they make sales in foreign markets, in order that they may not be at a disadvantage in competing against foreign combinations. Early in 1943, when authority for the President to make trade agreements was renewed, the Congress adopted an amendment to the Trade Agreements Act which singled out cartels for special attention. The author of this amendment declared on the floor of Congress that its purpose was to serve notice that the Congress is opposed to cartel operations.

In most of continental Europe, cartels have been lawful, and governments have attempted to regulate

rather than to prevent their restrictive activities. In France, a criminal statute which appeared to prohibit monopolistic practices was interpreted by the courts in such a way as to authorize most cartel activity. In Germany, restrictive cartel activities were not forbidden, but in 1923 a government agency was given the right to supervise them in order to prevent actions contrary to the public interest. Subsequently, the Nazis greatly increased the authority of the government over the cartels and used these bodies as agencies to carry out government policies.

Within the British Empire there has been considerable difference of policy toward cartels. In England agreements to control prices and production have been permitted, but the law has forbidden business groups to coerce their rivals. Some of the British Dominions have enacted laws which resemble the antitrust laws of the United States. Canadian law, for example, provides for the investigation of business combinations and agreements, and for punitive measures where there are restrictions contrary to the public interest.

stances of any of these industries justify types of restriction which are not generally acceptable, a question will arise whether these restrictions should be established and administered by private agreement or whether alternatively, intergovernmental agreements should be used.

If in the post-war world cartels are permitted to operate abroad in ways which are forbidden in this country, issues will arise about our policy toward the operations of American exporters in foreign cartelized markets and toward the importation of commodities which are controlled by foreign cartels. It will be necessary to determine what steps this Government should take to prevent the foreign cartel from destroying the independent American exporter, and what steps we should take to assure the United States an adequate supply of foreign cartelized goods at reasonable prices.

Certain specific proposals as to policy have been made. It has been suggested that governments agree to prohibit such practices as price-fixing, restriction of output or exports, allocation of markets, and suppression of new inventions; and that each government undertake to enforce this agreement within its own jurisdiction. Modifications of national laws and international conventions governing patents have been proposed in order to prevent the use of patents for restrictive purposes and to make new inventions more widely available. Interchange of research which has been sponsored by governments has also been suggested. It has been proposed that in those special cases in which control over prices and output would serve a public purpose, international agreements for such control should be made between governments instead of between private business enterprises. It has been suggested that an international agency be established to help carry out such a program by keeping a record of international private agreements and of the structure and control of international combines and by investigating complaints of restrictive cartel activity in order to recommend corrective measures to the participating governments. Such an agency, it is suggested, might also promote the interchange of new scientific discoveries and industrial methods and might, from time to time, recommend further steps toward an agreed economic policy among the nations as to trade practices.

Can We Eat Well?

From a speech by Dan A. West (right), of the War Food Administration, U.S. Department of Agriculture, presented June 30 at the Annual Meeting of Consumers Union.



The question that I shall try to answer is really this: *Can this Nation provide for all its people a diet that meets accepted standards of nutrition?*

On a purely statistical basis, the answer is a ready affirmative. The study of Food Consumption Levels made recently by a joint committee set up by the Combined Food Board revealed that per capita supplies of essential nutrients are sufficient to meet the standards of the Food and Nutrition Board of the National Research Council. This study demonstrates that the balance between food supply and nutritional requirements is such that every American can have an adequate diet.

It would be hazardous, however, to accept these per capita estimates of supply as proof that every American is well fed. The hazard lies in overlooking the real meaning of the "average" consumer. We must realize that the per capita figure is obtained by dividing the total number of consumers into the total food supply. The actual division of food takes place on no such basis.

There are two factors that set the consumption pattern of food for any family. One is the amount of money available for food, and the other is the family's selection of various foods available within the expenditure level.

THE ILL-FED THIRD

Several years ago, when the President of the United States called attention to the fact that "one-third of

the Nation is ill-fed, ill-clothed, and ill-housed," we assumed that this condition existed because of low national income. It is still true that a considerable segment of our population is deprived of adequate food, clothing, and shelter because their income is insufficient to meet basic needs. In 1943 about one-fourth of our families had incomes of less than \$1,250. Over 8.5 million families, representing over 30 million persons, had incomes of \$100 or less per month per family during 1943.

This is a fact that is likely to be overlooked by those who see an inflationary threat in the increased take-home pay of industrial workers, by those who oppose subsidies as a means of keeping down the cost of living, by those who feel that rationing is the complete answer to the wartime problem of food distribution, and by still others lulled into complacency by the thought that national income will reach the staggering total of 153 billion dollars in 1944.

How much food can be provided on an income of \$1,250 per year? In 1943 the Bureau of Home Economics estimated that an adequate low-cost diet for an urban family of four cost about \$2.63 per person per week. This would mean an expenditure of \$547.04 annually—43% of total income. Among the top families in the low-income group, an adequate diet would be possible only by the most careful planning and marketing. For the families earning \$1,000 or less, it would be virtually impossible to attain. We can safely say that several

million families were not able in 1943 to buy enough food to maintain health and efficiency. This in itself would seem to indicate that the answer must be "no," when we attempt to decide whether everybody can be well fed.

FOOD SELECTION

A second factor which influences adequacy of diet is a family's *selection* of food items. This is a far more difficult thing to measure than family income, and relatively few studies are available to indicate the choices made by groups of families.

Surveys among industrial workers, however, give us some interesting clues on food selection. In 1941-42, the diets of 1,080 workers in the Lockheed Aircraft Corporation at Burbank, California, were analyzed for their content of both protective foods and essential nutrients. Only 36% of the men had seven or more servings of citrus fruits or tomatoes during a week. Twenty-three percent had no citrus fruits during a week. About 20% had four or more slices a day of whole wheat, rye, or dark bread. Only 7% ate a whole-grain cereal every day; slightly over 50% used no whole-grain breakfast-cereal in a week. Only 11% of the men ate regularly vegetables containing vitamin A. Sixty-three percent reported an average daily consumption of milk less than the accepted standard; 37% had an average of less than one-half the recommended amount, 11% did not drink milk. Eighty percent of the men ate meat with recommended frequency; another 15% had nearly the recommended frequency.

Among this group of workers, low income cannot be held as the cause of inadequate diet. Here nutritional standards are not being met because of faulty selection of food.

LIMITATIONS IN SELECTION

What are some of the limiting factors that operate to prevent intelligent selections?

First is lack of accurate nutritional information. In spite of recent gains in technical knowledge among nutritionists, no means have yet been devised to bring this knowledge to large numbers of people who are in greatest need of help. Nutrition education in most communities reaches middle and upper income families. There is good reason to believe that the gospel of

the "Basic 7" has not reached across the railroad tracks.

From a "Gallup poll" last year we know that many Americans are not including all the seven groups in their daily food selections. In February 1943, the American Institute of Public Opinion undertook a nationwide canvass in which one-day diet records were obtained from selective samplings of the population. The poll showed that 45% of persons had no citrus fruits, tomatoes, or salad greens; 34% had no dairy products; 25% had no leafy and yellow vegetables. Smaller percentages had no other vegetables or fruit; meat, fish, or poultry; or whole-grain or enriched cereal products.

Although some of these lacks may be due to low income, we must assume that poor selection of food items by individuals is the underlying cause of inadequate diet among the majority.

NUTRITIONAL EDUCATION

Certainly the lack of general understanding of sound nutritional practice is not due to any deficiency in scientific knowledge. The fault lies in the educational methods by which we have attempted to disseminate information. In trade parlance, we have a good product, but we have not merchandised it.

Perhaps there is need to adapt to this field those techniques by which Americans commonly learn to make choices—advertising and salesmanship. There is always the temptation to regard scientific information as "pure" or "sacred" and therefore not subject to propaganda techniques. Although this concept may be very satisfying to the scientist, it is likely to deprive Mrs. Housewife of information that would enable her to make more intelligent choices.

A second factor that limits the housewife in making intelligent choices among foods is the fact that nutritional information has not yet been translated into sound marketing advice. The consumer does not buy a dollar's worth of vitamin C; she buys tomatoes and citrus fruits. When should she buy canned tomatoes, fresh grapefruit, canned orange juice? Should she buy fresh tomatoes or fresh cabbage? How can the family budget be planned to include the Basic 7 food groups most economically? Does X brand of canned peas offer the housewife a better buy than Y brand of canned corn? Is one

brand of "fancy" corn at 17¢ the equivalent of another brand at 23¢? Should margarine be used, or butter?

In trying to get the answer to some of these questions, the consumer finds the path blocked. At some points the block represents merely the unwillingness or inability of educators to meet practical problems, a reluctance on the part of teachers and civil servants to leave the ivory tower and compete in realistic fashion with pseudo-educators and advertising men. At other points, the block represents a deliberate organized attempt to confuse or mislead the consumer-buyer. Well organized pressure groups "plant" articles attacking legitimate standards and grades in national magazines; committees appointed by business groups "investigate" text books to be sure that the housewife's children will learn nothing that might point up the need for accurate buying guides; and every attempt is made to confuse economic issues with suspect political motives.

Among certain circles it is fashionable to say that the consumer knows what she wants and needs no assistance in making her selections. Actually, the amount of factual, unbiased information available to consumers is extremely small. The fact that you belong to an organization in order to secure this kind of information is testimony in itself to the fact that such data are not freely available to all consumer-buyers.

SELECTION TAKES TIME

A third limitation upon intelligent selection of foods is especially important in wartime. This limitation is the simple one of *time*. With thousands of women serving in the dual capacity of housewives and war workers, shopping becomes a serious problem. Add to that the necessity of budgeting ration points and you can readily understand why many families do not have a proper diet today, even though the money income of the family may have increased. Although in-plant feeding facilities have expanded, there are still millions of war workers who must either carry lunches packed at home or patronize lunch stands for sandwiches, pie, and beverages. The urgency of the production job has led to a mistaken belief in many plants that time is too precious to permit adequate lunch periods. The War Food Administration provided money to encourage school lunch programs which in many

cases provide the only balanced meals available to children of war workers.

FOOD HABITS

Habit cannot be overlooked as a factor that influences proper selection of food. In our diverse population, various nationality groups cling to traditional ways of selecting and preparing food. Although there are still many people who will argue that these cultural patterns are maintained because of preference, it must be recognized that low income is an important force which has prevented change in the past. Families do change food habits when income levels rise—as witness the improved market for fruits, vegetables, and milk in the Southern States today. As Dr. Frank G. Boudreau, Chairman of the Food and Nutrition Board, National Research Council, has pointed out, "Every dietary study reveals that in general the adequacy of the diet declines as income falls and rises as income increases. That is because the protective or health foods are the best-liked and most expensive foods."

What I have attempted to point out thus far may be briefly summarized, as follows: Although total food supplies are sufficient to provide an adequate diet for everyone in the United States, low income alone makes it impossible for at least one-fourth of our population to be well fed. Improper selection of foods leads to inadequate diet among large numbers of our people, even though in-

come may be theoretically sufficient to provide food to meet accepted nutritional standards. A study of family food consumption in the United States made by the Bureau of Home Economics indicated that as late as 1942 probably at least one-third of American families had diets low in calcium, riboflavin, or both, and that smaller proportions of the families had diets low in other nutrients. We have no reason to believe that the situation has improved since 1942.

WHAT SHOULD BE DONE

A group such as this will not be content with an analysis of the problem—you will want to consider what can be done about it. Briefly, I would suggest the following:

For the lowest income groups, some direct means of increasing family income or of providing the protective foods. This should be regarded as an investment in our Nation's future, for we cannot develop strong, alert citizens unless we can insure proper food for each generation.

Dr. Boudreau has well expressed the arguments for such a policy: "When there was unemployment and more food was produced than the people could buy, governments bought up the surpluses which haunted them afterwards, or paid producers to restrict production. The aim was to prevent a break in prices which would have ruined the producer, but while this aim may sometimes have been partly achieved, it was accomplished at the expense of the consumer, and at a high cost in public welfare. By subsidizing consumption instead of production, the Government spends no more, maintains production, and greatly improves the health and welfare of the people."

Coupled with this program must be continuing vigorous efforts to make price control work and to fight quality deterioration, upgrading, and garden variety "chiseling" by wartime profiteers, large and small.

Accurate information concerning adequate diet and means of achieving it must be made freely available to all people. In presenting such material, educators and Government officials must forsake outmoded teaching methods, and substitute in their place aggressive merchandising campaigns of the type that have proved effective in influencing consumers' choices.

An organization such as Consumers Union can play an important role

in developing and distributing such information. Free from the conservatism which characterizes most of our schools and colleges and from the limitations placed upon public agencies, you can demonstrate leadership in this important field. As Consumers Union pioneered in testing commodities, so it needs now to pioneer in testing educational techniques and methods. There is no other single field of knowledge so important to American consumers as *food education*. We look to Consumers Union for its usual aggressive, courageous, leadership.

Report on CU's Case

(cont'd from inside front cover)

and its method of distribution are acceptable. Or it may grant a partial victory by deciding that the pamphlet is a proper one if properly distributed, and send the case back to the District Court for a hearing and decision on the Postmaster's reasons for banning the report. Since the latter decision would represent a partial defeat for both sides, either or both might ask the Supreme Court to take the case in preference to having it returned to the District Court.

A complete defeat for CU in the Court of Appeals would be a decision that the Postmaster General alone has the right to determine what should be banned from the mails, and that the Court has no jurisdiction here. (This is the contention of the Government attorneys.) Defeat would also result if the Court, considering the method of distribution only—and not the merits of the pamphlet itself—should decide that the method of distribution was improper.

It is expected that whichever side loses the pending decision will ask the Supreme Court to take the case. This will postpone further action at least until October, depending upon when the Court of Appeals decision is handed down.

Two possibilities exist should the Supreme Court refuse to take the case: (1) A definite decision by the Court of Appeals, representing complete victory for one side, would be final; (2) in the event of an inconclusive decision by the Court of Appeals the case might be sent back to District Court where the whole legal process would begin over again, with the introduction of new evidence and new arguments by both sides.

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CUMULATIVE INDEX

Each issue of the Reports contains this cumulative index of principal subjects covered since publication of the 1944 Buying Guide issue. By supplementing the Buying Guide index with this one, members can quickly locate current material and keep abreast of changes resulting from new tests. Page numbers run consecutively beginning with the January 1944 issue. Jan. 1-28; Feb. 29-56; Mar. 57-84; Apr. 85-112; May 113-140; June 141-168; July 169-196; Aug. 197-224.

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